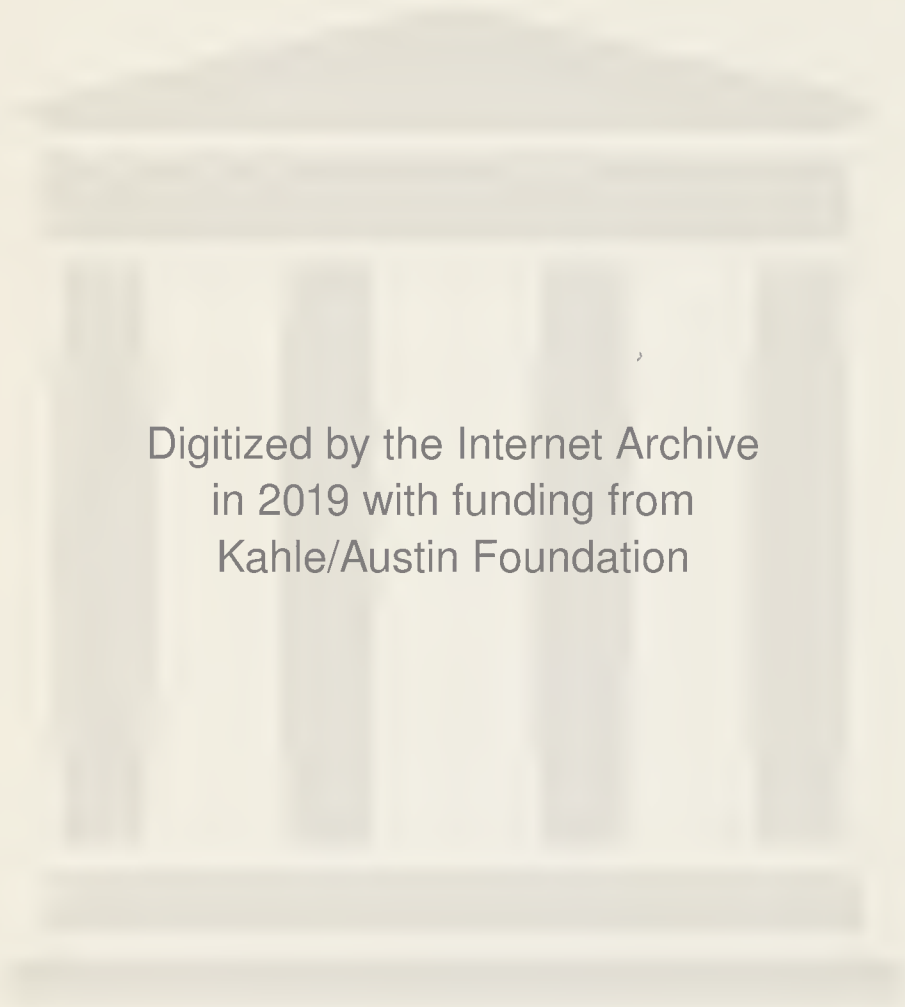


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"FRANCISCAN, SAINT MICHAELS, ARIZ."

An Ethnologic Dictionary

— OF THE —

Navaho Language



THE FRANCISCAN FATHERS,
SAINT MICHAELS, ARIZONA.

Ref.

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NOTE

1968

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A novel experiment in lexicography, undertaken by some of the Franciscan Fathers, is "An Ethnologic Dictionary of the Navajo Language." Their method is to describe all natural objects, diseases, modes of giving names to persons and places, animals, industrial occupations and religious and other social customs, and to give the words and phrases appertaining to each individual thing. The material has been collected, they say, mainly by their observations, though they have consulted the works of Washington Matthews and other authorities. The mass of facts thus presented is very large, and much light is thrown on the social culture of the Navajos. There is, for example, an elaborate description of the ritual dances; and, on the other side of life, a full account of how lice are dealt with. A large vocabulary is given, the pronunciation of words is indicated, and incidentally, there are suggestions for grammatical principles. The bulky volume is a valuable contribution to American Indian sociology.

-- The Nation, Sept. 1, 1910

COMMENTS OF PROFESSORS OF ANTHROPOLOGY

"The Dictionary is an admirable work both for the linguist and for the ethnologist and is unique in many respects. It forms the best introduction to the culture of the Navajo Indians that we possess and has the peculiar advantage of introducing the reader to the world of the Navajo through the concept of the Indian himself. It is a richly informative book and it is intimate without being conventionally sentimental." Dr. Edward Sapir, Department of Anthropology, University of Chicago.

"The Dictionary will long stand as a fundamental contribution to the southwestern ethnology. It is absolutely essential in the working library of anyone interested in the characteristics of the American Indian. Further, its unique approach through the medium of language gives an insight into the nature of culture unlike that of any other work." Dr. Leslie Spier, Department of Anthropology, University of Washington, Seattle.

"An Ethnologic Dictionary of the Navajo Language is still the standard and most complete work of the Navajo Indians. Indispensable to all students of the Athapascan languages and cultures, the most useful to the student of general ethnology." Gladys A. Reichard, Department of Anthropology, Barnard College, Columbia University, New York.

PREFACE

The philosophy of a people is exhibited to good advantage by a combined study of its language and archæology, as the one frequently elucidates the other. The present work is developed along these lines, and words bearing on a specific topic have been grouped together, while the information which has been added is frequently verified by a list of words in use. Works already published have not been consulted to a very great extent, as an endeavor was made to obtain original information from native informants. But as these were much at variance it became necessary to select only the most reliable and consistent information, which is here presented in the shape of brief notes. The illustrations, too, have been largely obtained from native informants, or drawings made were submitted to them for corrections. A large number are drawn from actual specimens on exhibit in the Museum of the Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y., while that of the Navaho Smithy is a reproduction from the *Navaho Silversmiths*, by Dr. W. Matthews.

We also owe some suggestions to the following authorities who have been cited or consulted:

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FRANCISCAN FATHERS.

Saint Michaels, Arizona,
April, 1910.

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KEY TO THE ALPHABET

THE CONSONANTS

The greater number of consonants have been adapted from the English alphabet, though their pronunciation in Navaho is more marked than in English, and each character is given a uniform value throughout.

b as in English been.

h as in English hemp.

d “ “ den.

j “ “ judge.

g “ “ gig.

k “ “ ken. This

character, unless clicked, is almost uniformly followed by an aspiration; hence, it is written kh. The aspiration is at times very guttural, which is indicated by kq.

l as in like.

w as in will.

m and n as in man.

y “ yield.

s as in sit, city.

z “ zone.

p, r, c, v, qu, do not occur as in English, and f occurs only in foreign words. t does not occur as a single character, but is either clicked or aspirated.

CONSONANTS PECULIAR TO NAVAHO

Some sounds of the Navaho are expressed by digraphs, hence:

ch as in church. dl as in ordinary l preceded by d.

dz “ adze. ds is the surd of dz.

gh, for which there is no approximate equivalent in English. This is a guttural g to which the rolling sound of r is added.

q represents the sound of gh in Loughlin, Dougherty, or German ch in lachen. An intermediary between h and q has been written with h to facilitate reading. Frequently this gut-

tural aspiration is added to the harder consonants; hence, in addition to kq, there are such others as chq, tsq, tq.

kw represents the sound of English qu in quick.

qu, however, is similar to the sound heard in when.

ł represents a strongly aspirated l, for which the English has no equivalent. The sound is produced by taking and holding the position for pronouncing an ordinary l and pressing the air through the sides of the mouth. At times this is preceded by t; hence,

łt is a combination of t and ł.

tl' represents a sharp, lateral, exploding sound, produced by forcing the aspiration through the side of the mouth, closed for the pronunciation of a combined tl. The expulsion is rapid and simultaneous with the pronunciation of t and l. Many mistake ł, łt and tl' for kl, thl, and similar oddities.

sh always as in shall.

tq is a strongly aspirated t, or, rather, q preceded by t.

ts as in German zanken, or English pretzel.

wh is a combination of ghw and often interchanges with simple w or gh.

zh as z in azure.

CLICKED SOUNDS

ch, k, t and ts are frequently clicked, i. e., pronounced entirely separate from the following vowel; hence, a special character is used in representing this peculiarity—cḥ, ḳ, ṭ, tṣ. ḳ, in addition, is very guttural and explosive.

VOWELS AND DIACRITICAL MARKS

The vowels have the continental sound. Syllabic quantity is indicated by long and short marks placed above the vowel, thus: ā, ǣ, ē̄, ī̄, ō̄, ū̄, for long vowels, and ă, ǣ̇, ě̇, ĭ̇, ǫ̇, ŭ̇, for the short syllables:

ā	as in	fār.	ǎ	as in	ǎrt.
æ	“	bād.	ǣ	“	băt.
ē	“	dāte.	ě	“	děbt.
ī	“	pīque.	ĩ	“	pĭn.
ō	“	nōte.	ǒ	“	dőne.
ū	“	pōōl.	ű	“	pűll.

Nasality and syllabic quantity are also indicated by distinctive marks placed over the vowel—ā, æ, ē, ī, ō, ũ, for long nasal sounds; â, æ̃, ê, î, ô, û, for the short nasal sounds.

As no general rules for the accent could be laid down, the greater stress put upon certain syllables is indicated by a special mark placed over the vowel or diacritical mark; thus, á, í, é, á, etc. Secondary accents and pitch are not indicated.

An abrupt close of the vowel sound is indicated by ' , placed after the vowel, while the hiatus preceding a vowel is indicated by ' preceding it. In this instance the vowel is sounded to its full value, as, for instance, a'â, where the two have a distinct inception. When this mark precedes n, the latter frequently has the sound of dn, as in dníeper.

The hiatus proper (') placed after a vowel indicates a fairly guttural exhalation, which at times is equivalent to h, and even q. Frequently this sound has been rendered with h.

ń indicates an accented n.

Where consonants or vowels are doubled or trebled they should invariably be sounded as often as they appear. In compounded words, and other instances, a duplication of consonants has been omitted when a fairly careful pronunciation justified the omission. Moreover, vowels are often interchanged, so that many words occur in several forms, some instances of which have been noted in brackets.

In regard to the verb, the past and future tenses have been added in most instances, and are placed in brackets immediately following the present tense of which, ordinarily, the form of the first person singular is given.

An Ethnologic Dictionary of the Navaho Language

INTRODUCTORY.

THE NAME, NAVAHO.—“How and when the name Navaho originated,” says Dr Washington Matthews, in *Navaho Legends*, note 1, page 211, “has not been discovered. It is only known that this name was given by the Spaniards while they still claimed the Navaho land. The name is generally supposed to be derived from ‘*navaja*,’ which means a clasp-knife or razor, and to have been applied because the Navaho warriors carried great stone knives in former days. It has been suggested that the name comes from ‘*navajo*,’ a pool or small lake. The Navaho call themselves *diné*, or *diné*, which means simply, men, people.”

The word Navaho, or, originally, *Navajo*, is first mentioned and applied to this tribe of Indians by Fray Alonzo Benavides, O. F. M., in his *Memorial to the King of Spain*, written in 1630. After describing the Gila Apaches, Benavides says that more than fifty leagues north of these “one encounters the Province of the Apaches of Navajo. Although they are the same Apache nation as the foregoing, they are subject and subordinate to another Chief Captain, and have a distinct mode of living. For those of back yonder did not use to plant, but sustained themselves by the chase; and to-day we have broken land for them and taught them to plant. But these of Navajo are very great farmers, for that is what Navajo signifies—great planted fields ”

From the expression, "the Apaches of Navajo," it is evident that the word Navaho was originally not given to the people, but was the name of the province or territory in which they lived, or, in other words, the Indians themselves were called Apaches, and their country was called Navajo, until later the name Apache was dropped and the name of the territory applied to its inhabitants. Just as we say the Pennsylvanians, or the Texans, instead of the Americans of Pennsylvania, or the Americans of Texas.

As to the signification of the word *Navajo*, Benavides says it means "great planted fields." Not only Benavides, but also such eminent authorities as Dr Brinton and Bandelier tell us that the Navaho, when first met by the Spaniards, were tillers of the soil, erected granaries for their crops, and cultivated their fields by irrigation. Now, the Spanish dictionary has the word "*nava*," meaning a flat piece of land, a plain, a field. From *nava* the word *Navajo* may possibly be derived, just as *lagunajo* is from *laguna*, or *yerbajo* from *yerba*, or *latinajo* from *latin*. The old Spanish suffix, "*ajo*," like the modern Spanish suffix "*acho*," seems to give to a word, not only an augmentative, but also a depreciative signification; thus, *laguna* means pond or lake, and *lagunajo* pool or puddle; *yerba* means herb, and *yerbajo* weed; *latin* means latin, and *latinajo* bad, ungrammatical latin. According to this, since *nava* means field, *navajo* would mean a large, more or less worthless field.

The only difficulty in this derivation is the fact that the word *navajo*, as derived above, has the accent on the second last syllable; thus, *navájo*, while in the proper name, Navaho (or Navajo), the Americans place the accent on the first syllable, *Návāho*, and the Mexicans and Indians on the last syllable, *Nāvājó* and *Nawehó*. Taking the accented syllable as a basis of comparison and derivation, the following extract of a short article on the *Origin of the Name Navaho*, by Edgar L Hewett, in the *American Anthropologist*, January-March number, 1906, page 193, is of interest, and has much in its favor.

“In the second valley, south of the great pueblo and cliff village of Puye, in the Pajarito Park, New Mexico, is a small pueblo ruin, known to the Tewa Indians as Navahn, this being, as they claim, the original name of the village. The ruined villages of this plateau are all Tewa of the pre-Spanish period. This particular pueblo was well situated for agriculture, there being considerable acreage of tillable land near by—far more than this small population could have utilized. The old trail across the neck of the mesa to the north is worn hip-deep in the rock, showing constant, long-continued use. I infer that these were the fields of not only the people of Navahn, but also of the more popular settlements beyond the great mesa to the north where tillable land is wanting. The Tewa Indians assert that the name ‘Navahú’ refers to *the large area of cultivated lands*. This suggests an identity with Navajo, which Fray Alonzo Benavides applied to that branch of the Apache nation, then living to the west of the Rio Grande, beyond the very section above mentioned.” See quotation from Benavides above.

“These facts may admit of two interpretations—the expression, ‘the Apaches of Navajo,’ may have been used to designate an intrusive band that had invaded Tewa territory and become intrenched in this particular valley. On the other hand, the Navaho———may have occupied such areas of cultivated lands, that their habitat, wherever it was, would have been known to the Tewa as Navahu, ‘the place of great planted fields.’ If the first interpretation is correct, it would doubtless be verified by archeological evidence at the ruin of Navahn. It would seem, at any rate, that the Tewa origin of the tribal designation, *Navaho*, is assured.”

Bandelier, in his *Report on the Southwest*, does not mention Navahn as the name of a ruin or village visited by him. But he has a lengthy description of Puye and other ruins of that region. The Santa Clara Indians, who are of the Tewa, or Tehua nation, stated to him that the cause of the abandonment of the pueblos were drought and wars with nomadic tribes. The

Navaho still speak of a region, which they call "dinéṭqǎ" (diné country), and which their fathers occupied before they came to their present habitat. This region, according to their traditions, corresponds to the modern Jemez Country, and the Tewa Country. So the name Navaho may possibly be of Tewa origin, and brought from dinéṭqǎ. It is somewhat remarkable that both derivations, the Spanish as well as the Tewa, confirm the interpretation of Benavides.

ORTHOGRAPHY AND PRONUNCIATION OF THE WORD NAVAHO.—

In this work the form Navaho is used instead of the older and more correct form, Navajo. This, for the following reasons: (1) It has been suggested by several prominent ethnologists that this form be adopted for this work. (2) Navaho has been declared by the Bureau of Ethnology as its official form; it is used in all its official reports and bulletins, and has been copied by all who are connected with the Bureau, by many authors and writers of note, and by others. (3) Last and not least, the form Navaho approaches nearest to the English pronunciation, and offers the least difficulty to the general reader.

In the English pronunciation of the word Navaho, the first a is short and sounded as a in "hat;" the second a is indistinct; the h is strongly aspirated; the final o has its natural sound, and the accent is on the first syllable. Thus, in reading the word Navaho (or Navajo), the vowels, and the v and h (or j), have about the same sound as in the sentence, "have a hoe." The Mexicans place the main accent on the last syllable, pronounce the h slightly guttural, and sound the a as in "ma and pa." The Navaho themselves, when using this name, pronounce it thus, Na-we-hó.

ORIGIN AND STOCK OF THE NAVAHO.—For any one who believes in the unity of the human race, and the divine inspiration of the Bible, there can hardly be any doubt that the Navaho are of Asiatic origin. They are the most southern

branch of the great Dene nation of Indians, now commonly known as the Athapaskan stock. All the tribes belonging to this stock or family speak dialects sufficiently similar in phraseology, construction, root-words, and other grammatical peculiarities, to amply justify the inference that they are descended from one common parent stock. They all call themselves by a name meaning men or people, which is more or less similar in all the dialects. Thus, we have *dane*, *dene*, *dine*, *dune*, *dindje*, *nde*, *tinneh*, *teni*, etc.

Of the extent of territory over which the Athapaskan stock is spread, Father A G Morice, O. M. I., says: "No other aboriginal stock in North America, perhaps not even excepting the Algonquian, covers so great an extent of territory as the Dene. The British Isles, France and Spain, Italy, and two or three of the minor European Commonwealths, taken together, would hardly represent the area or the region occupied by that large family."

The historian, Hubert Howe Bancroft, in his *Native Races of the Pacific States*, tells us "the Tinneh are a people whose diffusion is only equaled by that of the Aryan or Semitic nations of the Old World. The dialects of the Tinneh languages are by no means confined within the limits of the Hyperborean division. Stretching from the northern interior of Alaska down into Sonora and Chihuahua, we have here a linguistic line of more than 4,000 miles in length, extending diagonally over 42 degrees of latitude, like a great tree, whose roots compass the deserts of Arizona and New Mexico, and whose branches touch the borders of Hudson Bay, and of the Arctic and Pacific Oceans."

Of the northern Athapaskan or Dene Tribes in Canada and Alaska, Fr Morice says: "West of the Rocky Mountains they are to be found—to the borders of the Eskimo tribes, while on the east side of the same range they people the immense plains and forests which extend from the Northern Saskatchewan down almost to the delta of the Mackenzie River. From west

to east they roam, undisputed masters of the soil, over the almost entire breadth of the American continent, though a narrow strip of seashore country separates their ancestral domain from the waters of the Pacific and those of the Atlantic. With this unimportant restriction, they might be said to occupy the immense stretch of land intervening between the two oceans."

South of the Canadian boundery, Déné tribes, or remnants of them, are found in Oregon, Northern California, Arizona, New Mexico, Texas, and down into Old Mexico, the Navaho (diné), the Apaches (ndé), and the Lipanes (ipa-ndé), being the most southern. Thus, there is a complete linguistic line from the banks of the Gila River in Southern Arizona, northward, almost to the very shores of Behring's Straits, and from the sunny mesas and plateaux of Arizona and New Mexico, up to the snow-clad peaks and plains of the Arctic regions, are found tribes speaking kindred Déné dialects, which certainly points to an Asiatic origin for the Navaho, as the line of cognate languages and dialects from the British Isles to India shows the Indo-European or Aryan stock, and the Asiatic origin of the nations of Europe.

MIGRATION OF THE DÉNÉS.—None of the Dene tribes have any clear and distinct traditions as to how they originally came to the land which they at present inhabit. But a few dim and vague myths and legends hint at the migration of their forefathers in times out of mind.

In 1863 Father Petitot, O. M. I., was told the following by the Yellow Knives, a Dene tribe at the Great Salt Lake, concerning their origin: "In the beginning there existed nothing but a giant, so tall that his head swept the vault of heaven, for which reason he was called *Yakke-elt'ini*. He lived to the west, and barred our entrance to this desert land. A chase was made after him, he was killed, thrown to the ground, and his body fell so as to connect both lands. His body being petrified served as a bridge for the pericdical migrations of the reindeer. His head is in our island, while his feet are on the western land."

A few years later Mgr. Tache, Bishop of St. Boniface, found the same tradition among the Chipewyans of Lake Athabasca. The Hare Skins, living in the Arctic Circle, call the Rocky Mountains the dorsal spine of the earth.

In 1874 Father Petitot, visiting a more southern tribe, the Thi-lan-ottini (*People-at-the-End-of-the-Head*), heard the same tradition when inquiring after the etymology of their name, the only difference being that the head of the fallen giant struck near their habitat, while his feet rested far away in the north-west.

Scant remnants or traces of this tradition are found among the Navaho of to-day. In their legends they tell of yei tso, a big, strong and mighty giant, the greatest and fiercest of all the alien gods, whose father is said to have been a stone. "About 40 miles to the northeast of the top of Mt. San Mateo," says Dr Matthews, in *Navaho Legends*, note 138, page 234, "there is a dark, high, volcanic hill, called by the Mexicans, El Cabezón, or the Great Head. This is the object which, according to the Navaho story-tellers, was the head of yei tso." Petrified wood is still called by the Navaho, yei bitsin; yei, or giant's bones, and the numerous lava flows of New Mexico are called yei bidik, or giant's blood.

If sufficient allowance is made for the often trivially vivid and fanciful imagination of the Indian, it is not difficult to recognize in this an embellished tradition of their migration from Asia to America, either over the frozen Straights, or along the Aleutian Islands. Besides, some of the tribes, as the Hare Skins, Quarrelers, and others, have traditions of other Dene tribes living on a western continent. The Navaho, too, have a tradition, although rather vague, of some people who belong to them, and who live far away. Although some place their home in the north, others in another direction, or do not know in what particular direction to place it, yet there is no doubt as to the tradition itself, since they have a special name for these people, calling them *diné nahodlóni*, i. e., they are also *diné*, or Navaho.

How or when the Navaho entered their present country is, and may ever remain, a subject of speculation. According to some authorities they came in the thirteenth century, while others place their advent in the fourteenth or fifteenth century. At any rate, the first Spanish explorers and missionaries found them—*Los Apaches de Navajoa*—in full possession of their territory in northern New Mexico, from where the fathers and grandfathers of the present generation moved farther westward to the region which they now actually occupy. They have no traditions about the people who inhabited the numerous cliff dwellings and ruins scattered throughout their country, which shows that the ruins were already empty and forsaken when they arrived. Some of the cliff dwellings have, in consequence, been taken up into their myths as the abodes of yei, or gods. From this it would seem plausible that the Navaho have their homes in the Southwest about five hundred years.

The home of the Athapaskans was far to the north; the whole interior of Alaska is still peopled with tribes of that stock. It is, therefore, likely that the Navaho, being the foremost of these roaming, migratory tribes, traveled by slow movements, and pushed on southward by easy stages, along the eastern range of the Rocky Mountain region, until they met the sedentary Pueblos of New Mexico, in their fixed homesteads and permanent villages, where their further progress was arrested, and where they eventually established themselves. Later, the Apaches and Lipanes separated from the main body and went still further south.

For the manner in which the Navaho themselves explain their origin, and their coming into their present country, see article on "The Lower Worlds."

SITE AND AREA OF THE NAVAHO COUNTRY.—The Navaho country, or reservation, situated partly in the northeastern corner of Arizona, and partly in the northwestern corner of New Mexico, is at present the largest Indian reservation in the United

States. It lies between the 35 and 38 degree of latitude and the 108 and 110 degree of longitude. The original treaty reservation has several times been enlarged and extended by the addition of new territory, the last extension having been made very recently, so that the reservation now contains 12,360,723 acres, or about 19,313 square miles, or about covers the area of New Hampshire, Vermont and Rhode Island, with a margin. Besides, the Navaho still occupy off the reservation 2,304,000 acres, or about 3,600 square miles. In this is not included the acreage of the Moqui reservation, which is now totally surrounded by Navaho land, and upon which almost 2,000 Navaho are living.

PHYSICAL FEATURES OF THE LAND.—The greater part of the Navaho country is a bare and barren desert. It is traversed by a range of mountains from northwest to southeast. The northwestern end of this range is called the Lukachukai Mountains (*lukachugai*, *white reed patches*), the central part is called the Tunicha Range (*tqontsa*, *large water*), and the southeastern end the Chuska Range (*choshgai*, *white spruce*). The higher regions of this range are covered with a splendid growth of white pine (*pinus ponderosa*). At a lower level the piñon (*pinus edulis*) predominates, and still lower the slopes are covered with forests of red cedar (*Juniperus virginianus*) and juniper (*Juniperus occidentalis*). Patches of scrub-oak are to be found anywhere on the mountains, while in the cañons cottonwoods, box elder, aspen, alder, walnut, peach, and a few other species of trees, thrive.

Beside the main range of mountains, there are a few isolated groups, for instance, the Carrizos (*dził náozihí*, *mountain surrounded by mountains*) in the northeast, and the *dził Hjín* (*Black Mountains*) in the west. The mountains are cut up and reft by deep-gorged, tortuously winding cañons, through which the rain, falling on the mountains, is drained out into the valleys. There are no live rivers in the Navaho country, except the San Juan

in the northeast, and the Little Colorado in the southwest. On the reservation a few uncertain creeks, springs, and floods from the cañons, must be depended upon for irrigation. In some localities there are signs of abundant underground water. The annual rainfall averages from 10 to 14 inches and is usually confined to two short seasons, in the spring and in the fall. The greater part of this falls between the latter part of July and the forepart of September. The spring rains are not reliable, and both seasons are separated by about three months of absolute drought.

The altitude ranges from 4,000 feet in the lower regions to 6,000 and 7,000 feet in the higher parts, while the mountain tops are 9,000 and 10,000 feet. Owing to this high altitude the nights are cool and pleasant all year round, the winters are long and cold, and the season for maturing crops is short. The spring is usually very stormy, with high southwestern winds, and the summer is very hot, although it is always pleasant in the shade, and the heat cools off rapidly after sunset.

Large deposits of bituminous coal are found in various parts of the reservation, while other parts present the appearance of having once upon a time been burnt out. Traces of volcanic activity can be noticed in many places. No precious metals or other minerals of value have, till now, been discovered, at least, not in paying quantities, although considerable prospecting has been, and is still being done in this territory.

The valleys of the Navaho country, on first sight, present the appearance of broad, rolling wastes, covered in some places by sagebrush, cactus, yucca, greasewood, and bunches of grass. The valleys, as a rule, are destitute of trees, except where irrigation is practiced, or where a sufficient amount of underground water is near enough to the surface. In such places cottonwoods, and other trees, thrive well, as also fruit trees, grains and vegetables.

For further references see respective articles—Flora, Fauna, Agriculture, etc.

POPULATION.—According to the latest Government census, the Navahos number considerably more than 27,000. These figures are undoubtedly too high, and are the result of averaging and guessing rather than of an actual individual count. It would, too, be a very difficult task, in fact next to impossible, to take an accurate numerical census of the Navaho tribe, owing to peculiar sociological and topographical circumstances. In the first place, about one-third or more of the tribe live scattered about outside of the reservation limits, some being found as far as twenty miles below Zuñi, which itself is almost fifty miles from the southern boundary line of the Navaho reservation.

The reservation itself is very extensive, and the physical conditions thereof are such that it is impossible for the Navahos to live in communities or villages. Wherever there is a spring, or a piece of land that can be irrigated, and a crop of corn, squash and melons, even oats and wheat, raised on it, a Navaho settles down. His next neighbor may live within sight or, perhaps, one, five, or ten miles away. Besides this, he may have another residence at the place where his herds of ponies and sheep are grazing, and, perhaps, still a third home among the timber, where he spends the winter with his family. Thus, the greater part of them have two, some even three residences, where they stay at different seasons of the year. From this it will easily be seen, that in taking up a census of the Navahos, some will be overlooked while many others will be counted twice. In the wooded mountain regions a census taker may pass by near a half dozen hogans, or huts, without knowing it, or he may count whole families twice, since a given place in this strange country appears entirely different when approached from a different direction, to one who is not well acquainted. This also shows how unreliable it is to make an inference or average estimations from the count of the inhabitants of one region to those of another region.

According to the census taken when the Navahos were brought back to their country from Fort Sumner, in 1868, their number

was estimated at less than 8,000, or about 7,300. However, it is a well known fact that not all the Navahos were captured during Kit Carson's invasion of their country in 1863, but that large numbers of them were still roaming at large. Another census was taken, or rather attempted, in 1869, for the purpose of distributing sheep and goats among them, which showed their number to be less than 9,000. Still another census was taken up in 1900, which gave the number of Navahos living on the Fort Defiance agency, and on what is now the Ship Rock and San Juan agency, and in the region north of the Moqui reservation, at 10,000. Herein are not included those living on the Moqui reservation, about 2,000, nor those living outside of the reservation limits, upwards of 4,000. Thus, the census of 1900 gave the number of Navahos as being more than 16,000, or 17,204. This may, perhaps, be nearer the truth than the latest Government census, and, although probably the most accurate census ever taken, is still not reliable. There is no doubt that the Navahos have steadily increased since 1868, and that at present they number from 16,000 to 18,000 souls. To say that the Navahos number about 20,000, more or less, is about as accurate as their number can be given at present.

For their social customs, religious beliefs and ceremonies, industries, etc., see the respective articles.

Words Referring to the Cosmogony and Natural Phenomena

THE UNIVERSE

Navaho cosmology comprises twelve worlds, or under worlds. The globe which we inhabit is slightly elliptical in shape, with a flattened base, and is wholly stationary. Moreover, it is entirely surrounded by four bodies of water flowing around it, and emptying into the west through an opening in the sky. The earth is covered with the sky which, in shape and size, is similar to that of the earth, and rests on pillars placed at the cardinal points and the center of the earth. The sky is divided into four vaults, one above the other, each of which is furnished with compartments for the various peoples inhabiting them. The entrance to these vaults is made through openings provided in the center of each vault. Beyond them, however, is space and an unknown region.

The sky is considered male, the earth female, and both are in the relation of man and wife to each other. The earth may also be considered the mother of all living, insomuch as it produces vegetable life, and harbors many insects and animals in addition to being the abode of man.

WORDS REFERRING TO THE EARTH AND SKY

ní', the world, the earth. nf'hodilqil, the dark world; nf'halehf, the red world; nf'hodotl'ish, the blue world—divisions of the lower worlds.

ní'hodilqil nakhi bedahunakhá, in the second vault or shelf of the dark world. Similarly, tqágo and dígo bedahunakhá, the third and fourth vaults.

ní'dasakhād, the earth is there, referring to its flat, slightly oval shape. ní'hosdzān (nāhosdzān), the earth.

nāhoké', the land in distinction to water.

ní'ninel'á, or ní'ndanes'áji, the borders of the earth.

bidá, the rim or edge of the world.

ní'káshbâ, the limits of the earth (at water's edge).

ní'dahazlāgo, to the end of the earth or land.

tqúntqēl aqéhinīyí, the broad water flows around and meets.

tqo néhelf, the water flows or encircles continuously.

tqo siyfn (siyf), the water flows quietly.

tqo ādāhilē', the water falls, waterfall.

ní'alnf, or nahosdzā (nahasdzā) alnf, the center of the earth.

nahosdzān qídes'ná, or nahasdzā naha'ná', an earthquake; or nahasdzān nahas'ná, nahasdzān ádesgād, the earth trembled; nahasdzān desdô, the earth sounded or burst.

ní'qáogai, emergence into the eleventh world.

hājfnai, moving upwards, the emergence into the present world, the place of emergence.

yā, the upper, the sky.

yādilqil, the dark upper, the firmament, sky; yāgai, or nāhogai, the white upper, the evening twilight, the white of dawn.

yā'āsh, or yā'ash hoká, in the heavens beyond.

yā'nnēl'á, horizon; tqokáshbâ, water line which, with ní'káshbâ, forms the horizon or point where sky, water and earth meet and are visible to the eye.

yā'alnf, the center of the sky, the zenith.

nakhígo, tqā, dígo yāghahoká, the second, third and fourth opening in (or vault of) the sky.

yā tqát'á', the shelves or pockets of these skies.

SUN AND MOON

Both the sun and the moon are borne across the skies by divinities. Trails, thirty-two in number, have been created for their travels, and summer and winter solstice occur as the divinities complete the total number and start their return from the northern- or southern-most trail, respectively.

The sun and the moon bearers are considered masculine.

johona'af (jí'hona'af), the sunbearer (bearer of the day), the sun.
shă, the sun (orb), sunlight.

tlēhonā'af (tlāhunā'af), bearer of the night, the moon.

oljē, the moon.

johonā'ai, or oljē bināāstlē', encircling moisture, rings around the sun or moon.

yāhadīdlād, sun or moonlight shining through an opening.

ādodlā, the sun or moon pierces the clouds.

bikīdīdlād, it (sun or moon) illumines an object.

shābikégo, sunwise, as the sun goes.

shādāji, from the sun, or from north to west, to south, to east, to north.

shāndfn, sunlight.

shābitlōl, johonā'af bitlōl, sunrays, sunbeams.

shābitlā'jīlchf, sun halo, or basic sun-red.

shā'sedó', the sun is hot, (a hot object).

biłnāldoi, overcome by heat. Sunstroke does not occur.

shāji sēdā, sētqf, sēzf, I sit, lie or stand in the sun, I am sunning myself.

shāji nahāstsād, I bask in the sun.

hadīchī, the sun burns spots, or shābidīlchf, sunburnt.

shābīghā, all day (from sunrise to sunset).

shānīghā, the shortest day, winter and summer solstice.

TIME

Time is told by pointing out the position of the sun in the sky. The day begins with the dawn, and its principal parts are sun-

rise, midday and sunset, while the intermediary parts of the day, too, are expressed by positions of the sun. The day closes with sunset, or rather, with the approach of darkness, which also inaugurates the night. For the latter, however, no apparent attempt is made at a division of time beyond a mere guess at midnight, and the mention of the approach of dawn. The rise and decline of the moon does not serve as an indication of the time of night, but reference is at times made to the position of some constellations, such as the rise and setting of the morning and evening stars, the position of the Pleiades (*dilyéhe*), etc. The time at night is occasionally of importance as, for instance, in indicating the time for reciting the songs at dawn for the close of a ceremony, and the like.

The complete time circle is herewith given.

haylkhâ (*nt'æ*), it is dawn.

nané'nłkhâ, or *nancinłkhâ* (*nt'æ*), or *nāndzágai* (*nt'æ*), it is daylight.

áltso hós'id (*nt'æ*), it is full daylight.

qa'f'â, sunrise.

sháhină, or *qină' sháhidonál*, or *t'ădo sháhinăda*, shortly after sunrise (about five fingers above the horizon).

dăhădî'â, the sun is well up; *nikhêldûi*, or *honidûi* (*honidôî*), it is getting warm (say between 8 and 10 a. m.)

kăd ălnăé'â, close to noon (about 11 a. m.)

alnínă'â, midday, noon.

yaădez'ă, afternoon; *yădeyă*, or *dozhôgo yădeyă*, or *dozhôgô yaădez'ă*, it is declining, in the late afternoon.

qídîdescîf', toward sunset, in the evening.

qılchî', or *qılchî'hótso*, near sunset, towards evening.

hodîneskâz, it is cooling off; *hônîkâz*, or *shădoqinada*, toward sunset (about five fingers above the horizon).

shădoqină'da, just before sunset (two fingers above horizon).

bakhăgi as'ă, or *bakhăgi î'ă'*, shortly before sunset, when sun touches horizon.

i'fâ, sunset.

i'fâ bitfábâ, shortly after sunset.

nïhojf, darkness covers the earth, or nïhotlîsh, the earth is black (blue), qilîjf, after dusk; dozhôgo flqêl, it is pretty dark; chahólqêl, it is dark all around, quite dark.

tl'ěělnî, near midnight (about 11 p. m.)

tl'ěělnî, midnight.

yikhaftâji, leaning towards dawn (probably the milky way is meant); or sôtso qāyá, the morning star is risen; or kâhaikha, all three expressions meaning, just before dawn.

haylkhâ, dawn, etc., ut supra.

Other expressions are also used, such as the following:

sôtso qayágo, when the morning star rises; haylkhágo, at dawn; shâ qayágo, at sunrise; shâ qiná'go, after sunrise, etc.

hós'id, hós'ígo, at daylight; ałkidá hós'id, it was daylight, or dawn, some time ago.

abínago, or tãábínago, in the morning; abíndâ (tãábíndâ), this (very) morning; alníná'adâ, this (past) noon; yaădez'ádâ, this (past) afternoon; yaădez'ágo, this (coming) afternoon; tígo yaădez'á, a little after noon; dîjf, to-day; jîdâ, to-day (this past day); jîgo, during the day, at daytime; tã jf, daytime.

tã tl'ě, at night; tl'ěgo, at night.

sôtso iyá, the evening star has disappeared; shâ iyá, at sunset.

qaish o'ál, or qai az'á, or qai holzhîsh? What time is it? Where is the sun? qaish yolkhál, what time of the night is it?

Clocks and timepieces are not in use, though recently some expressions have been adapted to indicate the time of the clock.

besh dîstšá', the clock struck; dukwídi dîstšá', what hour did it strike? dukwígo olkhîl, how many does it point? ashdlá dahalzĥîn, five black dots (five minutes); ashlá'áda dahalzĥîn, fifteen minutes; nezná dî ólăgo dobă'â alnf, half-past ten, etc.

LIGHT

The Navaho assign the various lights to the cardinal points, which are often designated in this manner.

Though openings for windows are not provided in the hogan, a fairly good light enters by way of the smoke-hole. At night the light of the fire ordinarily suffices for illuminating the interior of the hogan, as very little work is done by the light of a candle or lamp. In houses of modern construction, candles and lamps are being generally introduced.

At public exhibitions, fires are kept burning for illumination.

beăđíndīn, the light (by which objects are visible).

adíndīn, the light.

shă, or shă', the light, particularly of the sun.

hayołkhál, first light at early dawn, twilight, which is also called hós'íd.

năhodætłish, azure, the deep sky-blue at dawn or sunset.

năhotsoi, the yellow light at sunset.

chahałqél, darkness, dark light of the north.

chahałqél, it is dark, or chahałqel hé!diltłád!, it's dark, strike a light!

dishtłád, (diltłă' dideshtłł), I strike, or make, a light.

SHADE

In summer shade is obtained under rudely constructed shelters. (Compare summer houses). Parasols and umbrellas, which are purchased at the stores, are used in riding and driving. No special importance seems to be attached to one's own shadow.

chăhă'ó, the shade, a shelter, an umbrella.

bichăhă'ó, or bichăhăsh'ó, his or her shadow.

MIRAGE

The following are presumably equivalent terms for mirage.

hădahuneyánigi, or bił hădăhuneyá, increasing or growing with it, in reference to the optical illusion witnessed occasionally

in the desert, by which trees, mountains, lakes, and the like, seem suspended in the distance, but vanish on approach.

hādāhunestqīn, the undulations of the tropical heat, the evaporating heat of midsummer.

hādāhuniyé', the mirage proper. This is personified, and accordingly color is assigned to it; hence, hādāhuniyé' laḡaí, white mirage; hādāhuniyé' dotlísh, blue mirage; hādāhuniyé' litso, yellow mirage; hādāhuniyé' dilqíł, dark mirage. These are assigned to the south, the corresponding colored hādāhunes-tqīn, being assigned to the north.

hadahuniyé' also designates a stone similar to agate which is used ceremonially with other precious stones. Formerly this stone was a distinguishing feature of the chiefs and was attached to the hair cord.

ECLIPSES

An eclipse is caused by the *death* of the orb, which is revived by the immortal bearers of the sun and moon.

During an eclipse of the moon the family is awakened to await its recovery. Similarly, a journey is interrupted and work ceases during an eclipse of the sun. Songs referring to the hozhóji, or rite of blessing, are chanted by anyone knowing them, otherwise the passing of an eclipse is awaited in silence. It is not considered auspicious to have a ceremony in progress during an eclipse of the sun or moon, and a ceremony is often deferred on this account. The rising generation, however, pays little or no attention to this custom.

johónā'aí dāāstsá, the sun is dead, eclipse of the sun.

oljé daāstsá, the moon is dead, eclipse of the moon.

johonā'ai, or oljé hanádsá, the sun, moon, recovered, the eclipse is no longer visible.

PHASES OF THE MOON

dā'neitqín, or dāhītqá', crescent, new moon.

ałnf beelqél (half dark), half moon, first quarter.

hanfbās, full moon; jī' hanfbās, full moon appearing in daylight; tlē hanfbās, full moon after night.

chahalqēl nādza, darkness returns, last quarter.

qāsāl, the moon is visible after dawn.

oljē beedīndīn, moonlight.

oljē behól'īn (jī' nahalīn), bright (like day) moonlight.

oljē dohozhó beedīndīda, or behol'īda, behot'īda, the moonlight is not very good.

STARS AND CONSTELLATIONS

The creation of the stars is attributed to hashchézhīni, the Firegod, who also distributed the various constellations, giving each its peculiar name. As in other instances, so also on this occasion the coyote contrived to participate in the work of creation by robbing the Firegod of his pouch in which he carried the material for the stars. And after he had placed his own star conspicuously in the southern skies he scattered the remnants of the pouch over the entire heavens, which accounts for a multitude of stars bearing no special name. In consequence, too, the entire creation of the stars is attributed by some to the coyote.

Though there are comparatively few constellations the names of which are generally known, it is none the less well established that astrology is extensively practiced among the Navaho. The fact that the class of singers pursuing dest'í, "looking," or astrology, are much in demand previous to the conducting of any important ceremony, would seem to indicate as much. Hence it is reasonable to assume that a much wider knowledge of the various constellations exists than is here indicated. This knowledge, however, is in possession of some few individuals who are loath to disclose it, owing to the circumstance that astrological pursuits, which require the secret and solitude of night, are opprobriously classified with witchcraft.

The older shamans were wont to initiate their pupils gradually into the intricacies of astronomy by pointing out the new constellations to them as they appeared on the horizon. And as an

apprenticeship usually required several years, sufficient time was had to make the initiation a thorough one. This extended also to stellar influence on climatic changes, or the destinies of man, with the corresponding remedies, and the like information. Certain portions, however, of this knowledge were enveloped in some mystery, which was lifted only after the most rigid test of fidelity. Thus, for instance, words like *sâ'â naghái*, "in old age walking," and *bike hozhó*, "on the trail of beauty" (*Matthews*), are said to signify some important, though well known constellation, a change in which would prove disastrous to the existence of the universe. Hence this invocation, which is attached to a large number of prayers and songs, would seem to be a petition for the preservation and prolongation of age and life, while "the trail of beauty" (in the skies) indicates the proper key to their interpretation.

What may be considered an instance of stellar influence upon climatic changes is told of *ī'nī*, thunder, a constellation appearing in the southern skies, and a companion of the constellation *shāsh*, the bear. When *ī'nī* *beetsós*, the feather or tip of thunder, approaches and touches the snout (*bichf*) of the bear, it is a reliable indication of the return of thunder in spring, with the renewal of life in vegetation and the animal kingdom.

As a rule each larger constellation is equipped with satellites, larger stars, which form an integral part of a given group. Thus, *atseetsósi beetsós*, the feather or tip of Orion; *shāsh beetsós*, the feather of the bear. They are also provided with *bokhó*, fire or flint of the star, which ignites it, and in other instances with *bizhf*, body, *bichf*, nose, *bijá*, ears, or *bitsé*, tail, to distinguish and trace the figure. Some of these are mentioned in the following.

hastqfn sakai, feet ajar, a large, irregular square in *Corvus*; *hastqfn sakai beetsós*, his feather; *bizhf*, his body; *bigfzh*, his staff; *bokhó*, his fire.

shāsh (*sô'*), the bear; *shāsh bichf*, his snout; *bijá*, his ear; *bokhó*, his fire; *beetsós*, his feather.

shăsh lichí, the red bear, between bear and thunder constellations.

f'ní', the thunder; í'ní bokhó, his fire; beetsós, his feather.

třistsó, big snake, at base of bear and thunder constellations.

atsěětso, the big tail. Others render it the big first one, appearing in the northern skies after ndizfd, the beginning of the month; the forepart of Scorpion. The legend assigns it to the southern sky.

náhokhös bakhá'i, the revolving male, Ursa major, the Big Dipper.

náhokhös bă'ádi, the female revolving, Cassiopoea.

atsěětsósi, tailfeather, or the slender first one (?); the belt and sword of Orion. etsósi, the feather, was the name given by hashclézhini, the Firegod, which coyote (atsé hashkhé, the First Angry), changed to atseetsósi (atsédi etsósi, of the First feather), with reference to himself; hence, the coyote's feather.

sô hótšĩĩ, the pinching stars, center double stars in lower branch of Hyades. These are also called baalchfni, children of dilyéhe and atseetsósi, Pleiades and Orion.

gahat'ei, rabbit track, cluster of stars under Canis major.

sô' bokhó'i, large stars scattered over the heavens.

ăkaisdâhi, the milky way, which is sometimes rendered yikhaí sedâhi, which awaits the dawn, owing to its approach to the east toward morning.

sô' dondizfdi, no-month star, called also mâ'i bizó', the coyote's star, or Canopus.

dilyéhe, Pleiades.

hayolkháł bēetsös, or sôtso biké' neilkháăgi, dawnfeather, or the big star followed by dawn; náhodætřish beetsös, the feather of the southern blue; náhotsói beetsös, feather of the evening twilight, evening star; chahăłqěl beetsös, or sôtso chahăłqěl beetsös, feather of darkness, or the big star darkness feather.

břtsölēhi (?)

sô' bíhi, the deer star; debé tsétqă, mountain sheep.

dasáni, the porcupine, Dolphin.

atséetso bigfish, the cane of the big first one, probably chief star in the group of Scorpion.

atséetsósi bokhó, the fire of Orion; beetsós, its headfeather; bitsé, its tail.

náhokhós bokhó, the north star.

náhokhós bigfish, the cane of the north star.

sô', a star; sô' yázhe, small stars; sôtso, any star of the first magnitude; sô' lăni, many stars.

do bēndizfidi, or dondīzfidi, no-month stars, which do not change their position every month. Of these there are several.

sô' bīlfidi, star with smoke, a comet; sô' bīlfidi qāyá, a comet appears.

sô' nāłtsīd, or ádahāłtsīd (ádāłtsīd), falling stars, meteor.

sô' hīdilyéd, or ilaghúli, running stars, shooting star.

sô' haldé', the stars appear.

sôtso qāyá, or qanádă', the morning or evening star is risen.

CLOUDS

Navaho mythology also personifies various natural phenomena, the clouds, winds, fog or mist, rain, thunder and lightning. The abode of these divinities is in the four skies above whence they visit the earth inflicting disaster upon its inhabitants. They are usually distinguished by color, sex being attributed only to the rain. In this manner they are also invoked in prayer and song, and sacrifices and prayersticks made for each individual deity.

kös, a cloud; kös dilqıl, the dark cloud; kös dotłış, the blue cloud; kös litso, the yellow cloud; kös lagai, the white cloud.

kös qālě', it begins to cloud, fleecy clouds.

kös dá'ndajöl, the clouds are few and scattered.

kös dilkhó', it is cloudy, smooth clouds.

kös aqıdāhazná', the clouds are collected, cloudy.

kös tqá'ă', the clouds are moving.

kös ishchfn (yishchfn), the shape of a cloud, a design.

MIST OR FOG

áhi, the mist or fog; a' dilqıl, the dark mist; ă' dotl'ish, the blue mist; ă' litso, the yellow mist; a' lagaf, the white, mist.

áhi bechaholqél, a heavy fog.

áhi dá'dıldö, the fog is disappearing.

datqó, the dew, dewdrops.

shö', the frost; ıaigisi shóıgai, a heavy frost (whitening everything).

sıl, vapor hovering over the ground after rain, steam.

WIND AND STORM

ńłchı' dină'ě', the wind people; ńłchı' (ńłłchı', ńłtsı'), the wind; ńłchı' lagaf, the white wind; ńłchı' litso, the yellow wind; ńłchı' dotl'ish, the blue wind; ńłchı' dilqıl, the dark wind; ńłchı' kikhfzh, the spotted winds; ńłchı' ntlái, the left winds; ńłchı' shădá'ji nălaghăli, the winds which turn on the side from the sun; ńłchı' shăbikégo nălaghăli, the winds which turn sunwise; ńłchı' nodôzi, the striped winds.

ńfyöl, the wind, strong wind; ńchı, a breeze; děyöl, it is blowing; ńfyöl qāyá, the wind is up, it is blowing; nădzıyöldısi, small whirlwind; nădzıyöldısitso, whirlwind.

qaiyăēsöl, a storm or wind which drives up a rain.

lēsh hāsāl, a sandstorm (blowing sand in every direction).

lēsh nădöz, a whirling blizzard, sandstorm.

lēsh bıł qāyöl, sandstorm, wind which stirs the sand.

lēsh beətl'é, sand with night, or lēsh bechaholqél, sand with darkness, sandstorm darkening the sky.

yóöqölzhöd, the storm is passed, it cleared up.

shădichı', I take some fresh air; yăichı', let some fresh air in!

RAIN AND RAINBOW

The rainbow is frequently represented in colored sand paintings and ceremonial paraphernalia, and on the shield. The "trails" of the divinities are usually represented as made of various kinds of rainbow.

nłtsá (nıltsá'), the rain.

nłtsá'bakhá', the he-rain, rain accompanied by thunder and lightning; nłtsábă'ăd, the she-rain, a light, mild rain.

nłtsá'tl'öl, rainray; nłtsánajīn, the dark streaked rain (and clouds). These are now represented by horsehair in the decoration of the masks.

natsīlīd, the rainbow; natsīlīd agūdi, the short rainbow; natsīlīd iyīshi, a curved rainbow.

náhałtqīn, it rains; nahółtqâ, it rained; nahodołtqīł, it will rain; nă'dīzhół, a steady, fine rain; do dīłtqī, a general rain.

nikhídadīłtsf', it sprinkles; shikhídestsă', raindrops.

SNOW AND ICE

In earlier days children were bathed in the snow to harden them to the weather and exposure, a custom which is now disappearing. Snow is melted over the fire and used for cooking purposes. Snow shoes are not in vogue at present, though overshoes, or covers made of burlap and sheepskin, as also foreign overshoes, are now often designated as snow shoes. In the early days, however, a roughly shaped shoe of wood was attached to the foot for walking upon deep snow. A piece of pine or cottonwood, and even dried bark, was slightly pointed at both ends and secured to the foot by means of cords. As some difficulty was experienced in regaining one's balance in case of a fall, a knife was indispensable, so that, in case of an accident, the cords might be severed and readjusted. In consequence, the loss of a knife in deep snow was looked upon as fatal, and accounts for the wish expressed by parents in earlier days "that their children may not lose their knife." At present little or no use is had for these wooden or snow shoes.

yăs, zăs, snow; nchīł, yidzăs, it snows; nădishchīł (nt'æ), it snows again; chīł bechahołqēł, or chīł beetlē, heavy snow storm which darkens the sky; chīł hăsāl, snow storm blowing the snow in every direction; chīł nădōz, a blizzard; chīł bilqăyōł, drifting

snowstorm, penetrating every crevice; yĩsál, a snowflurry.

yasıtso, a big snow; yās labái, light snow which disappears after sunshine; yās dítłé, wet snow; yās yĩłtsai, dry snow; yās dīclĩfzhi, rough (top-frozen) snow; yāskhá nĩkhēs, snowcrust, crisp, shrieking snow; yāskhāāztqá, a firm snowcrust; alúkhā, a slippery snowcrust; yībá', a snow only in spots.

yās bĩná'ákhe, footprints in the snow.

yās bĩná'ātqĩn, tracks or a path in the snow.

ná'osdlĩd, the snow melts; tsĩ ná'osdlĩd, it melts rapidly.

yasfkhe, snow shoes; tsĩkhé, or tsĩnkhé, the wooden shoe, or yāsgo khé, the snow shoe; alúkhā sikhé, they (the shoes) support one on the snow; do bił'ikhá, or baghanákhá, one did not break through with them; tsĩn dāāzłfigi, any kind of wood; akhāsht'ōsh, bark; sagáni bahāsht'ōsh, dried bark.

tqĩn, the ice.

tqĩn dılqıl, the dark ice; tqĩn dotłĩsh, the blue ice.

tqĩn litso, the yellow ice; tqĩn łagai, the white ice.

tqĩn altqās'af, variegated ice, called also tqĩn łikhfzhi, the spotted ice, all of which are purely legendary.

tqĩn deilkhó', tqĩn deiltqó', smooth, slippery ice.

tqĩn bijē qadayá, ice whose heart bulges out, bulging ice.

tqĩn aqĩdĩłłád, rent ice.

tqĩn aqĩdĩtqál, cracked ice, the ice is cracked.

tqũistqĩn (yistqĩn), frozen water; tqĩn dā'nestšé, icicles.

nlóĩ (nĩłóĩ), hail.

shinitqĩn, I am freezing; sĩstqĩn, I am frozen; shideshtqĩnł, I will freeze; bĩnitqĩn, it is freezing; yistqĩn, frozen; dotqĩnł, it will freeze; nitqĩn (hastqĩn, hodotqĩnł), it is frozen (the ground, animals, trees, etc.); yishtqĩn (deshtqĩnł), I freeze an object, for instance, lice.

nahalyf' (naholyf', náhodolyf'), it thaws.

nalyf' (nālyf', nádolyf'), I thaw out.

nádeshyf' (nadishyf', nádideshyf'), I thaw out at the fire.

nashyf' (na'ĩłqĩ, ndeshqĩ), I thaw it out (a blanket or clothes).

WATER

Water is used for drinking and cooking purposes. Clear water taken from a running stream, or from a pool of rain water, is always preferred. Snow, too, is often melted to obtain good drinking water. Along river and arroyo beds the underground stream is allowed to collect in small holes dug for this purpose in midsummer. When conditions are otherwise favorable to advantageous location, water is drawn from pools and water holes, which ordinarily would not be considered. Cisterns and wells for collecting water are not made, and the hogan is generally built some distance from the water supply to insure its purity.

The custom of washing one's self in the morning is of very recent introduction, and by no means a general one. Lice and vermin, however, have ever been a source of irritation, which necessitates a relief found in the yucca bath, with which the hair is scoured from time to time. Ceremonial baths and waters are referred to elsewhere.

Canoeing is not in vogue. Along the rivers of the country flat boats are used to ferry the stream at high water tide. These are drawn up stream and then allowed to drift with the current and steered diagonally across it. On the return the same process is repeated. Fording is done in a similar manner by selecting a shallow spot in the riverbed and taking a course up, or against, the stream. In high water the rider often removes the bridle and drives his animal into the stream. He then plunges after it, and by holding to the tail of the horse is drawn across in safety. The Navaho in general are inexperienced swimmers and usually steer clear of water.

Though the Navaho ordinarily is very particular with regard to his personal drinking supply, and despises alkaline, filthy and stagnant water, his stock until recently was ill provided for. When possible, sheep and goats are now kept from bodies of water used for watering horses and cattle, and time and labor is also expended upon throwing up earthwork and dams in localities suitable for reservoirs for watering stock.

tqõ, water, a river, stream.

tqõ nlf', running water, a spring; tqõ qālī, water flows out, a spring; tqõ nltqóli, or tqõ nltšīn, clear, crystal water.

tqõ nlf (nlfīn) dītšā', the rush of water is heard.

tqõnīl ītsā', the dripping of water (water-drops) is heard.

tqõ siyfn (siyfi), a pool, lake of water.

tqũntqēl (tqõ ntqēl), the ocean.

tqahóqtqēl, the water widens out, the mouth of a stream.

tqõ nānesdīzi, the waters are tangled, spread over the whole area; tqõ bīshghān, the back of water, a wave.

tqõ bīshghā dānlghūsh, the waves splash and foam.

tqõ bīshghā nādādīdā', the waves break.

dā'nānlāghāsh, it bubbles (boiling water).

dā'nānshqāsh (dā'nānēlqāsh, dā'ndīneshqāsh), I boil water, make it bubble.

tqālawhūsh qaznsé', I'll stir soap; tqālawhūsh qansé' (hanúsā, qadīnesél), I raise foam, stir a lather.

qāhodībīn (qahodébīd, qāhodīdibīl), it (a spring or water hole) is clogged; tqõ bidādestlīn, a dam or water bank.

tqõ bidādīnshtlīn (bidādēltlīn, bidādīdeshtlīl), I dam the water.

dādīnshtlīn (dādiñltlīn, dādīdeshtlīl), or dāndīnshtlīn (dāndiñltlīn, dāndīdeshtlīl), I dam the water, put in a dam.

dadégīsh, the dam is broken; tqókīishjé, a crate extending over the water for watering stock.

DRAWING AND CARRYING WATER OR LIQUIDS

tqõ qahashlé (qahālō', qahideshló), I draw water with a rope.

tqõ hashkhá (hákhâ, hadeshkhál), I draw or dip water (with a vessel); tqõ yishkhá (tqõ nákhâ, tqõ deshkhál), I carry water, or more frequently, tqõ nashkhál (nnákhâ, tqõ ndeshkhál), I carry water again.

qādīshbīn (qadēlbīn, qādīdeshbīl), I fill a vessel.

ya'ishkhá (ya'íkhâ, ya'ideshkhál), I empty it.

yash'á (yá'â, yeidesh'ál), I spill or pour water on something.

khô tqóbīl yash'á, I extinguish a fire by water, or khû tqóbīl

náneshqǣzh (nanélqǣzh, nadinéshqūsh), I flood a fire with water.

yasẏd (yéizīd, yeidésīl), I pour it out, or turn a vessel over on its side.

nasās (nasésās, údesās), I sprinkle water (or sand) with sprinkler.

DRINKING AND WATERING STOCK

ashdlâ (eshdlâ, adeshdlâ), I drink water.

nâ'nszīd (nañzīd, nádesīl), I give you a drink, I pour out for you; shā'nzīd, pour out for me, give me a drink!

tqayislós (tqayflōs, tqádeslōs), I water a horse, lead him to water; tqayish'ēsh (tqayfēzh, tqādesht'ish), I water a couple of horses or more.

tqā'nshkhād (tqanēkhād, tqādfneshkhāl), I drive a few horses to water, or I herd them to water.

tqa'nsōd (tqanfyōd, tqādfnesōl), I herd many to water.

WASHING AND BATHING

tqáisgis (tqáségis, tqáidesgis), I wash or bathe it, I wash myself; tqánisgis (tqa'nségis, tqa'ndesgis), I wash you.

tqádisgis (tqadésgis, tqádidesgis), I wash or bathe.

shinf tqanásgis (tqanaségis, tqándidesgis), I wash my face; letšā tqanásgis, dishes; æ tqanásgis, I wash clothes.

tqahásgis (tqahoségis, tqáhodesgis), I scrub it.

tqó sēdō' betqádisht'ōd (betqādfīt'ōd, betqádidesht'ōl), I remove it with hot water, such as hair from a hide, etc.

DIPPING AND THROWING INTO WATER

tqō benash'ā (besá'â, bēdesht'āl), I dip a hat into water.

tqo benáshji (beshējā', tqó bēdeshtji), I sprinkle grain with water.

tqo bēnashlé (besélā, bedeshlél), I put a rope or piece of leather into water, I soak it.

tqo benashtqf (besétqâ, bedeshtqfl), I dip a stick or shovel into the water.

tqo benastsōs (beséltsōs, tqó bēdestsōs), I soak a blanket.

tqóbił nnsh'á (bił nná'á, bił ndesh'ál), I water plants, or fill a person with water

tqáyish'a (tqayf'á, tqadesh'ál), I soak my wagon, or I throw my hat into the water.

tqayishjá (tqayfjá', tqádeshtjǐ), I throw grain into the water.

tqayishlé (tqayflǎ, tqadeshléł), I put leather or rope in water.

tqayistsós (tqayfltsōs, tqádestsōs), I throw a blanket or hide into the water.

tqayishtqf (tqayftqâ, tqadeshtqfl), I throw a stick into the water.

tqayishnıl (tqayfnıl, tqádeshnıl), I throw several objects into the water.

tqáyishqǎn, or tqáqishqǎn (tqayflqǎn, tqayideshqǎł), I throw anything into the water.

tqayishtłzh (tqayftłzh, tqádeshtłzh), I fall into the water.

tqayishgyé (tqayfgö, tqádeshgö), I drop into the water.

tqǎłłáyistsós (tqǎłłáyfltsōs, tqǎłłádestsōs), I drop a blanket into the water.

tqǎłłáqishqǎn (tqǎłłáqflqǎn, tqǎłłáhideshqǎł), I throw anything into the water.

tqǎłłáyiltsid (tqǎłłáyéltsid, tqǎłłádoltsıl), it drops into the water, as, for instance, a stone.

Other terms are used ceremonially:

tqǎłłáyishnıl (yfnıl, tqǎłłádeshnıl), I drop several things into water or tqǎłłáyishné' (yflné', deshnıl), I throw or drop them, into water, or tqǎłłáyishdél (yfldél, tqǎłłádeshdıl), or tqǎłłáyisht'é' (yflté', desht'éł), I drop an animal into water.

FLOATING AND WADING

nash'él (násé'el, ndesh'ól), I ride in a boat.

yish'ól (f'el, ádesht'ól), I drown.

dish'él (dé'el, desh'ól), I ride a boat.

naāsh'él, or nash'él (nasé'el, nádesht'ól), I row or ride in a boat.

naāshkhó (naséłkhō, nádeshtkhól), I swim.

tqayishá (tqänséyă, tqadeshál), I go into the water, I ford a stream.

tqáyî'nashá (tqáyî'naséyă, tqáyî'ndeshál), I wade in the water.
tsé'nă'yishál (tsé'nă'nfyă, tsé'nă'deshál), I ford, cross a stream.

MODERN

nfyöl tqóqayilë', the wind draws the water, a windmill.

WEATHER AND TEMPERATURE

Air and atmosphere are not distinguished from, but designated by, the wind. The condition of the weather is ordinarily indicated by the description of a storm, or by simple qualification, such as cold or warm, pleasant or disagreeable weather. The temperature of water is described in a similar manner.

ńlchî', the air, atmosphere; ńchî' a breeze.

desdúi, it is warm; deskāz, it is cold; nestġgo deskāz, it is chilly; nestġgo desdúi, it is quite warm; (nestġgo, hidden).

nahóltqâ, it ceased raining, it has rained.

dobahadzidigġtġgo nfyöl, a terrific wind or sand storm; similarly, dobahádzidigġtġgo hashtġsh, or do-sohodobézhda hashtġsh, a very heavy road, a muddy road.

yóöqölzhôd, it has cleared off, clear weather.

dġlkās (deskāz, dólkās), it is cold.

ńldúi (desdúi, dólđo'), it is warm.

shġnġdlġ (sisdlġ, shidġnodlól), I am cold.

honesgaġ or honġgaġ (ntġé), it (the sun) is hot, warm.

chôhonagá (chôhunġagai, chôhodġnogă'), it is warm.

chġldô' (chġnġldúi, chġdoldô'), the sun is hot.

nfyôltso, a windstorm, it is windy.

tqóbiġ nchġl, or tqóbiġ deizhchġl, rain and snow, a wet snow.

yishdlô (ntġé), I am chilled.

qāyól (qāyöl, qādoyöl), the wind is up; dġyól (déyöl, doyól), it is blowing; dġchġ' (deshchġ', dochġ'), there is a breeze; or ġyól, (fyól, doyól), there is a wind, and ńchġ' (ġchġ', ádochġ'), there is

a light breeze; *nfyöl* (*nt'ée*), it blows.

lēsh hátsqās (*nt'ée*), the dust is stirred (by a herd); or *lēsh dá'ojól* (*nt'ée*), a volume of dust rising; or *lēsh dá'ogó'* (*nt'ée*), the air is thick with dust, a rain of dust; or *lēsh yánlzhē'* (*nt'ée*), a drizzling, "fringed" dust; *lēsdzōsf'*, or *lēshjosf'* (*lēsh adzfsi'*, *lēš ázdosí'*), dust left in their track, or *lēsh ojól* (*i'fjól*, *idojól*), a rolling line of dust; *lēsh ogó'* (*i'fgó'*, *idogó'*), a gradually falling line of dust.

tá'kōs, or *tá'askōs*, it is cloudy; *kōs dá'ojól*, a line of scattered clouds; *kōs dá'síltšōs*, a line of fleecy clouds, or *kōs dá'ogó'* (*nt'ée*), a falling or drooping cloud; *kōs dasákhād*, hanging cloud; *kōs bechahałqél*, or *betlē*, dark, heavy clouds.

áhi dá'ojól (*nt'ée*), scattered mist, it is foggy. Similarly, *áhi dá'síltšōs* (*nt'ée*), strung out over a valley; *áhi dá'ogó'*, falling mist, drizzling; *áhi dahikhál*, enveloping fog; *áhi bechahałqél*, or *betlē*, dense fog.

nłtsá' dá'ojól (*nt'ée*), it is raining in spots, or *nłtsá' dá'ogó'* (*nt'ée*), rain is falling (along a distant line); *nłtsá' betlē*, or *bechahałqél*, a heavy rain clouding the atmosphere.

nłtsá' ojól (*i'fjól*, *idojól*), and *nłtsá' ogó'* (*i'fgó'*, *idogó'*), rain along the entire horizon.

Similarly, *yās dá'ojól* and *dá'ogó'* (*nt'ée*), snow drifted by the wind, drift snow, and *yas ojól* and *ogó'*, etc., snow drifting in all directions.

chīl dá'gō' and *dá'ojól* (*nt'ée*), snow is falling, it is snowing here and there; *chīl ojól* and *ogó'*, it snows everywhere.

childá'ji, facing the snowstorm; *binashdá'ji*, or *nīyöldá'ji*, facing the wind (Cf. also snow, wind and storm).

hadó', the heat; *hakáz*, the cold (weather).

honesdó', it is (intolerably) hot.

(*nłchī'*) *yāhōt'é'*, the weather is fine.

náhuntlá', the weather is bad.

yisdá' quýē', it is close inside. (Cf. fresh air, under storm).

naháshō, it is damp.

hasgán, it is dry, there is a drouth.

tqó sědó', warm, hot water; tqó sākáz, cold water; tqó sızlí, or tqo altsisigo sědó', lukewarm water (Cf. ice).

DIRECTION AND DIRECTIONAL ASSIGNMENT.

The Navaho recognize the following directions:

East, qa'á'.

South, shada'á'.

West, ǣ'ǣ'á'.

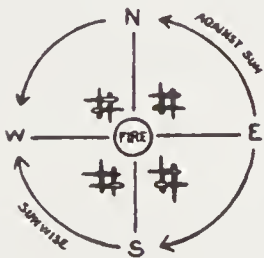
North, náhokhös.

Middle, alnf; ya alnfgi, the center of the sky, the zenith.
nĩ alnf, the center of the earth.

Upper, dégo or wódá'.

Lower, or down, yágo or yúyadi; biná'shi or ayái des'áigi,
are probably equivalents for the nadir.

The order here mentioned is followed in most ceremonial functions, the preference being given to the east. Thus, the heads of sand paintings always point eastward, and the patient is seated upon them facing the same direction. Numerous other instances enjoin the same order of sequence, as in entering and leaving the ceremonial hogan, in preparing the wreaths for unravelling, in marking and tracing lines with pollen, or administering the latter, all of which is begun at the east end, thence to the south, to west and north, completing the circle at the



point in the east. This course is called shābikégo, sunwise, or with the sun, while, when reversed, or beginning at a point in the north, thence to the west, south, east and north again, the order is called shadá'-ji, towards or facing the sun.

Frequently, too, direction is indicated by color. Thus, the dawn is assigned to, and indicates, the east, the skyblue the south, the evening twilight the west, and darkness the north. Hence, the symbolic color of the east is white, that of the south blue, of the west yellow, of the north dark or black. In conse-

quence sand paintings, for instance, of the sacred mountains are decorated in these colors, *sísnaĵĩni* (Pelado Peak), white, *tsó-dzĩł* (Mt. Taylor), blue, *dóókoshíd* (San Francisco Mountains), yellow, *debéntsá* (San Juan Mountains), black. Sacrificial stones, too, are assigned according to the color of the direction: white shell (*yołgai*), to the east, turquoise (*dotł'ízhì*), to the south, abalone (*dīchĩli*), to the west, cannelcoal (*báshzhĩni*), to the north, red-white stone (*tsełchfi*), to the center.

The legends make early mention of directional assignment. Thus, previous to the creation of the sun and moon, the light arose in columns of white in the east and of yellow in the west, for the day, while similar columns of blue in the south and black in the north, indicated the return of night. The direction was indicated by the course of these columns of light, and the turn from right to left, and vice versa, which now indicates the course with and from the sun respectively, originally indicated the turn with or against the light (*shābikégo*, *shadá'ji*).

In accordance with the general ritual preference for the east, which is also manifested in the prototype of the hogan, the exit, or doorway, of the Navaho hogan is always placed in the east, which is even observed in some modern structures. Possibly, too, this is done to facilitate the observance of the numerous rubrics with reference to direction. Similarly, the opening of the corral for public exhibitions is placed on the east side, while that of the sudatory is optional, some preferring the west to the east side, though usually the heated stones are placed on the north interior of the hut.

Intermediary points of the compass are ordinarily not specified, but are indicated in general terms, such as eastward for southeast, and so on. The direction to or from a point is generally indicated by adverbial particles attached to the name of a place, as *mā'itqódæ*, from Houck's Tank, *yōtqógo*, to Santa Fé, *áyakhĩnji*, towards Moqui, etc. Indefinite expressions, as, I am going north, coming from the south, are not generally used.

Words referring to direction.

qǎ'ǎji, eastward; shadǎ'ǎji, southward; ǎ'ǎ'ǎji, westward; náhkhosji, northward; or to the east, in the east, in an easterly direction, etc.

nĩtsĩji, before, ahead of me.

shikhédǎ, behind me; nikhéshdǎ, behind.

shǎlkĩs, aside of me; bǎlkĩs'gi, aside of him; yǎlkĩs, aside of it.

shinǎgi, around me; shikĩdǎ, above me; shiyǎdǎ, below or under me; sits'ǎji, away from me.

dǎ'ji, against, facing, as chĩldǎ'ji, facing the snow. Against may be expressed in other ways: bĩstqǎi, it (a stone) struck against the wall; bĩnistsé, I brace, place against it.

bikégi, or biké, after, behind it.

bĩghǎ'gi, alongside of, as yĩghǎ'gi yĩlaghũl, he runs along it (for instance, a fence).

atqǎ', between, amid, as diné bitqǎ', among the people.

biy'f', within, inside, among, as diné biy'f', among a crowd.

gúně, in here, inside; tĩódi, or tĩógi, in the open, outside.

tĩógo, towards the open.

biy'fdi, the interior; bakhǎi, the exterior or uppermost.

shinǎl (nt'é), in my presence, I attend.

qonǎndi, or wunǎnji, beyond.

binédi, in the rear of it.

bitsénǎgha (bizénaghadi), around its point.

bitsfji, at its base, near it.

nĩzǎd, far away.

da aqǎni, or da aqǎnji, it is near by.

tǎy'fdi, tǎy'fdiji, close, near by.

kwé'ě, or da kwé'ě, here; da khodó, or khodó, right here, here.

ǎji, over there; ǎdi lǎn, there.

qǎji, qǎjshǎ', or qǎdi, qǎdishǎ', where, whither?

qǎdǎ, from which direction?

qǎdǎ nt'f, or qǎdǎ lǎnt'f, whence do you come?

qǎgolá or qagóshǎ', or qǎgosh dinĩyǎ, whither are you going?

khují, here, this way.

yushdæ, or khushdæ, this way, towards me.

nlá'ji, or nlá'di, yonder; nlēdi, or nlēyæ, yonder, some distance.

bilá'di, on the other side of it; yáwodi, beyond it.

baghádi, on top of it; baghágo, up above.

dégo, upwards; yágo, downward, below.

THE CALENDAR

The year is primarily divided into two seasons, winter and summer. The intermediary seasons, spring and autumn, are referred to in conversation.

náqai, the year, literally another winter, since the year begins with winter.

qai, winter, or qaigo, in winter.

shí, summer, or shígo, in summer.

dā, or dāgo, in spring; aakhād, aakhādgo, in autumn.

náqaidā, or naqaiyædā, last year, but qaidā, last winter; shīdā, last summer; qaiji, winter-, shíji, summer- (denoting assignment, such as winter- and summer-chants or animals).

dāji, towards spring.

naaqá, it is winter again; naashī, summer is here again; or, anāniqāgo, when winter returns; anānishígo, when summer returns; dā naházlī, spring returned again.

The year is divided into twelve months, a division attributed to the coyote, who questioned the wisdom of assigning twelve months each to the earth and sky. Upon this suggestion the Creators then assigned six months to the sky for winter, and six to the earth for summer. The coyote, moreover, ordained that contentions should arise over the exact period of the first month, which they called:

ghāji, "back to back," namely, when the white of winter and yellow of summer meet, turning their backs to each other, the one to proceed, the other to retrace its steps. The month of October, with which the winter months and the year begin.

nłtsi'tsósi, or nłchĩ'tsósi, the light or slender wind, November.

nłtsi'tsó (nłchĩ'tsó), much or big wind, December.

yás nłtēs, probably melting snow, January.

atsá biyázh, "eaglets," February.

wózhchłd, March, the meaning of which is obscure.

The following are the summer months (shfji):

dáčhłl, short corn, April.

dátso, tall corn, May. Various versions are given of the meaning and pronunciation of the last two words. Some render táčhłl and tátso, tiny and tall leaves (bitá), others táčhłl and táč'tso, small and large feathers (bitá, feather) of eagles.

yá'ishjášchłli, "I insert the small grains," this month being designated by some as the month for planting, June.

næeshjástso, "the big sugar cane," July.

bĩnĩntátsósi, light ripening, August.

bĩnĩntátso, the great ripe, or harvest, September.

The month begins with every new moon, and frequent differences of opinion as to the proper month prevail. The calendar is set aright as the season progresses, comparisons often being made with the American mode of reckoning. No specific number of days is assigned to the year or month, and the days of the week are not designated by a special name. A man's age is reckoned according to the winters he has lived (náqai, an additional winter), the number being added. In tracing their age some event is mentioned and the number of years before or thereafter is given. Thus, two or more years before or after the return of the Navahos from Fort Sumner, etc. Few resort to placing a mark each year on some secluded rock, though this, too, is done.

In modern times the Sunday has been recognized as a fixed date and calculations are made accordingly, so and so many Sundays hence, two days from and after Sunday, etc.

dáč'neitqłhi, new moon.

nāhidizfdi, the month (is filled or over). The preceding word inaugurates, the latter completes the month.

damfgo (Sp.), Sunday; damīgo biskhā, Sunday's tomorrow, Monday; nakhiskhāgo damfgo, in two days Sunday (Friday); damfgo nabiskhānædā, last Tuesday; nakhiskhāgo damigo (damou) yædā, last Friday; tsëbī iskhāgo, in eight days; tqā iskhāgo damfgo, Sunday occurs in three days.

nāāqalfo, in a year (from now); naqaidā, last year (at this time); nakhi naqaidā, two years ago; dīsdīn naqaiyædā, forty years ago; tqādīn shī shīnāqai, I am thirty years old, etc.

iskhāgo, tomorrow; nakhiskhāgo, two days hence.

nakhiskhāndā, two days ago; iskhāndā, yesterday.

There are no such expressions as next or last week, the number of days always being mentioned. Though the months are designated by special names, one does not use such expressions as last April or next March, etc.

nihidīgái, it is whitened (blooming).

ūdahotso, it is yellow (autumn).

nihiditsīn, it (the fruit) has wood, it is ripe.

khōhotēdā, last summer or winter at this time.

khunāhodzai, next summer or winter at this time.

ostsēshidā, or nāōstsē shidā, two summers ago.

ostsēqaidā, or nāōstsē qaidā (nāōstsāqaidā), two winters ago.

tokhūnaghāndiji, just a while, for some time.

LIGHTNING AND THUNDER

Lightning and thunder are often referred to promiscuously.

ātsīnltīsh, the lightning, zigzag lightning.

hātsōlaghāl (atsōlaghāl), sheet lightning.

hājīlgīsh, flash lightning (in summer).

bó'ōs'nī', struck by lightning.

tsīn bó'ōs'nī', plants growing in the vicinity of a tree, or anything struck by lightning.

f'nī', the thunder.

f'ní' díłqíl, the dark thunder; f'ní' dotłfsh, the blue thunder; ī'ní' litso, the yellow thunder; f'ní' łagał, the white thunder; ī'ní' nodózi, the striped thunder; ī'ní' ntłái, the left thunder; ī'ní' łikhfzhi, the spotted thunder.

adi'nf' (adés'ní', adído'nfł), it thunders.

adıldfl, a peal of thunder.

qó'ós'ní' qűisqf, or f'ní' qűisqf, he was killed by lightning.

űjilgish qádahachł, the lightning flashes at night.

atsfntłfsh ándahatqá', the lightning strikes or descends into the ground.

tsín bilédolchłl, the lightning struck a tree.

łédolchłl, the lightning strikes somewhere.

ádolchłł, or łendflchłł, a rolling thunder.

THE LAND

náhoké', the land.

łesh, the ground, dust, dirt.

łesh nádadłgó', or qayá, a cloud of dust raised by the wind.

łehogyēd, a pit, cellar; qáhogyēd, a dugout, posthole.

ă'án, a burrow; náhódłtsó', a bog.

hashtłfsh, mud; hashtłfsh hódłjé, the mud clings.

hashtłfsh dłtsfdigi, sticky mud.

łénshtă (łeneshtă, łedłneshtăl), I prostrate myself, I lie prone on the ground.

łeyish'ă, I put (money) into the ground, bury it; łeyishjá, I bury corn; łeyistsös, I bury a blanket; łeyish'ësh, I bury two horses; łeyishłé, I bury leather; łeyishtqé, I bury an animal or person; łeyishnfł, several objects; łeyishtqf, a gun or stick; łeyislós, I bury a horse.

MOUNTAIN AND VALLEY

dzıl, a mountain, which at times occurs as dzıl, as in yolğaf-dzıl, the white shell mountain.

dă'iskłd, a hill; dădaskłd, bluffs.

dzilgīzh, a mountain pass.

dzilghá, dzilbaghádi, or simply baghádi, the top or summit, on the summit of a mountain, on the mountain.

dzil látqă, or dzil bilátqă, the summit, or highest point of the mountain; dzilnīťă, the side of a mountain; dziltăd, the base of a mountain; dzilbádi, or dzil bináni (binánidi), dzil alnfi, on the slope or grade of a mountain.

dziltqátă, dzilbitqátă, in a pocket of a mountain, a shelf on the side of mountain; dziltľă, or năstľă, a rincon or recess of a mountain or cañon.

dez'ă, a promontory, point of mountain.

dzil biné, or simply binédi, behind the mountain, on the rear side of a mountain.

dzil bitsīdi (bitsīdi), at the base of mountain, at its foot.

dzilgo, to the mountains; dzil bichf, in the direction of the mountains; dzilyf, dzil biyf, in the mountains; adilkhă, a dark nook in the mountain; dilkhă biyf, in the mountain nook.

tqe, the valley; tqégi, in the valley; tqe gúyă, down the valley.

STONE

Early Navaho implements were usually made of stone or wood, as iron and its value were little known. Accordingly, stone knives were used for cutting, whittling and scraping, while the name applied to the modern wood axe is suggestive of an earlier axe of stone. Stone knives, in shape like the arrowpoint, or elliptical, are still largely prescribed for ceremonial purposes, in cutting sacred buckskin, in unravelling knots, and the like. Yet the word besh (stone knife) is now generally applied to iron and metal, or anything made of it, unless from the connection a stone implement may be designated, such as nayenezghánf bibësh, the (stone) knife of the Slayer of enemies; bésdolăghăs, the serrate (stone) arrowpoint, etc.

Rare stones are employed as ornamental assets, and as sacrificial offerings in some rites.

Stone is not used as building material, except in modern structures, and in building dams or walls. Stones are heated preparatory to entering the sudatory.

A stone gristmill for grinding corn, coffee or wheat, is still in use by some. Presumably, the gristmill is a survival of early intercourse with the Pueblo. Indeed, some legends, in speaking of that period, introduce the women as occupied, side by side, in grinding corn on a metate, much as may be witnessed in any Pueblo to-day, and as being accompanied by a drummer, or flute player, timing them. At present the Navaho women do not do this in common as then, neither is the gristmill a stationary household fixture, as with the Pueblo. But when occasion requires, a large and convenient flat stone is sought in addition to one of smaller size and fairly rounded, which will easily roll over the larger stone, and the grains are crushed between them. The stones are then put aside or discarded, especially as flour and coffeemills may be purchased at a small cost. Petrified wood was sometimes used in sharpening the upper millstone by indenting its wornout surface; otherwise, little use is had for it.

The griddle still in use for baking meat and cakes, is a flat, round stone, which is placed over the fire and heated.

Various other references to stone will be found in the course of the several articles.

tsě', a stone or rock; besh, a stone knife.

tsěāghósi, flint rock; chězhīni, malpais rock, lava.

tsěāwózi, a pebble; tsezaf, gravel; saí, sand.

tsětso, or tsětsotqá', boulder, river boulders.

tsě dokózh, (salt rock), almogen (impure alum).

tsěkhô', native ochre; tsějě, (rock pitch), amber.

tsěnastqá (tsenastqáni), petrified wood, sometimes called yeitso bitsín, bones of yeitso.

tsě'ndās, (heavy stone), iron bearing stone, quartzite.

tsěni'ái, coal croppings; tsě' dotlízhi, perodots.

tsághadĩdĩni, transparent stone, rock crystal.

tsě lichí, rubies, garnets; tsěłchfí', red-white stone.

dotlízhi, turquoise; tsěsô', (rock star), white stone, glass.

tsě' dinsé, the growing stone; tsě' dildói, (the exploding stone), limestone; tsě'dlíd, burnt limestone; tsědadilídigí, lime.

tsětsăgi, stone croppings, mica, isinglass; tsě' bijékhăł, a stone rosin; nats'fílđ bichăł, (mythical), stone rosin.

tsě' qaha'nřligi, a modern quarry; tsě' qahash'níl (qahăníl, tsě' qahideshníl), I quarry stone.

tsě' nálăghúłi, or tsě' beěkhăshi, modern grindstone.

CAÑONS.

bokhó', or tsěkhó', a cañon, rock cañon, gorge.

chăshkě, an arroyo, a gulch.

tsěkhó bidăgi, the edge or rim of a cañon.

tsěyi', or bokhó' gúně', in a cañon; tsěkhó' biyí', in a cañon.

tsěkhó' chínlínigi, where the cañon flows out, mouth of a cañon; bíhilí', or tse'ilí' (tsehilí'), or tsěkhó' ilí', where it flows into the cañon, the head of a cañon.

tsětqă', (between rocks), in or at the head or mouth of a cañon.

tsěni', pocket of a cañon, a bench of a cañon with ruins.

tsětqăťă', a ledge or covered shelf of a cañon.

tsěăn, a cave; tsěédzís, a cavity in the rocks, rock tanks.

tsěhachí, a cliff; tsěťă', a pocket or enclosure of a cañon.

tsěkís, a crevice in the rock.

tsě' isdó', the rock is burst, a crack in the rock.

tsě' istqăł (yistqăł), a crevice or crack in a rock.

tsě' isdlăd (yishdlăd), the rock is rent asunder, rock fissure.

tsěbíhoditsă, a noise in the rocks, or tsěbíhodídlăd, the echo.

MINERALS

The Navaho do not mine. Brass for buttons was obtained from the Utes, and copper for bracelets and ornaments from the Mexicans and traders. Silver has superceded copper long since, and is purchased in Mexican coin from the traders.

óla (Sp.), gold.
 besh hitso, brass.
 besh lichf, copper.
 béshlagai, silver.
 besh dotłish, iron.
 chf dotłish, specular iron ore (hematite); tse ndās, iron ore.
 lé liyln, oil croppings, indications of oil; ákăkhû, oil (modern).
 lejln, coal, which is not used as fuel. The same is true of
 lejln bitěsh, coke.

CLAY

Various kinds of clay are used by the Navaho ceremonially and otherwise.

dlěsh, white clay, is used as spice with foods, or in painting the masks. The fire dancers paint their bodies with it on the night of the performance.

tqăłtłăhată', a clay gathered from a waterbed.

bis, adobe; bis lichf, bricks, both of which are not used as building material.

bis dotłish, blue clay or adobe.

deschf, red clay (reddle?); lětsoi, yellow ochre, brimstone.

lězh lězhłni, dark, black clay or ochre.

khû dídłtłish, a yellow clay used as an incense.

tqănl', alkali, alkaline earth. This is also expressed by lěyă self, it turned alkaline.

FIRE.



Aboriginally fire was produced by means of a drill consisting of a whirl of hardwood, and a tinderbox of pine or cottonwood. This box was a stick about an inch wide and thick, and about eight inches in length. Small holes, sometimes four in number, were cut into it, so that the friction caused by

spinning the whirl between the hands ignited the fibres in the cavities, which were then set ablaze by blowing upon it. The fire drill is now in use only at certain rites.

Subsequently steel and flint superceded the drill, and in turn were entirely displaced by matches, purchasable anywhere. These are carried in the pocket, or occasionally in the leather shoulder pouch. At home and at social gatherings the embers are raked from the fireplace and held between the fingers, or placed before the smoker in lighting a cigarette.

Ordinarily cedarwood is preferred for cooking in the open fireplace of the hogan, though for heating and illuminating purposes pine and piñon are substituted. Cottonwood, owing to its painful smoke, and hardwoods generally, are used only when other kinds are beyond convenient reach. Coal is not mined as it is not in demand for domestic purposes.

The light of the fire is generally sufficient for illuminating the interior of the hogan. In houses of modern construction, however, candles and oil lamps have been introduced to a great extent.

Fire also figures ceremonially, and is then sometimes referred to as "the pokers," from the leading feature of placing pokers at the cardinal points around the fire. Heaps of firewood are placed at each side of the entrance inside the hogan, which is then closed with an additional blanket hanging in front of the ordinary blanket curtain. The singer, patient, and all present, strip to the breechclout (women remove the jacket only), and sit or lie around the fire, which is kept going until all of the firewood, previously carried inside, has been consumed. After producing emesis by means of a concoction and a feather put into the throat, the patient and those present repeatedly walk around the fire, and finally two of the men jump over it from each of the cardinal points. Thereupon all leave the hogan for a few minutes to sun themselves and rub their bodies with sand, and then return to the hogan for the close of the ceremony. This usually takes place in the forenoon, and during its progress none of the inmates

of the hogan may leave it. One of the family remains outside to assist with anything that may have been forgotten.

In some instances, too, ashes figure ceremonially, as well as in the preparation of bread, or spicing of some herbs. Ordinarily, however, they are removed from the hogan and thrown outside.

Signalling by fire was done from some favorable point of vantage. A blanket was held or passed repeatedly over the fire to intercept the rise of the smoke. Little of this early warfare measure seems to be remembered at the present day.

(Cf. also fire dance, use of charcoal as color, the shinny stick, et alibi.)

khû', or khô', fire.

wolká, fire drill, the tinderbox.

beolká, the drill-stick or whirl, which is also called náyiz, or dilyfzi, the drill, or hogfshi, the stick.

didishjé (dædɪʃja, or didɪʃje, dīdeshjă), or dédishje (dedɪʃja, dedideshja), I kindle a fire, carry fuel.

dishtlād (dɪʃtɫă, dīdeshtɫɪ), I light a fire, make a light.

dishhɪd (dɪʃɪd, dīdeshɪɪ), I burn something.

béshtfel, steel flint; tsétfel, stone flint; tsíntfel, wood flint, hence tsíntfélé, a match.

tʃelkhû', fire struck with a drill or flint.

diltɪ', a flame; chízh, fuel (wood); destsfn, pine; dɪlkʃs, cedar; lejín, coal; bésbhíkhû, a modern stove; chílayí', a smoke-hole, chimney.

hɪd, smoke. A volume or cloud of smoke is expressed by hɪd bechahəqél, darkness; hɪd betʃé, night is caused by smoke; hɪd yātɪ' (yādatɪ'), a column of smoke ascending upward; hɪd dahfkhəl (ntʃé), a stationary streak of smoke, or hɪd da'síhtsós (ntʃé), a fleecy cloud of smoke, or hɪd dă'ojól (ntʃé), a scattered cloud of smoke, as is often seen on a quiet morning.

hɪd dɪlgá, or hɪd yīgáí, a signal by smoke; hɪd dishgaí (dɪlgă, dīdeshgă), or hɪd yishgá (yɪlgai, yideshga), I give a signal by smoke.

tēsh, charcoal; tēsh dishlīd (dflīd, dīdeshlīl), I make charcoal. dflīd, it is burnt; hoghān dflīd, or (hoghān) adfkān, a burnt hogan or house.

lēshchīf, ashes.

hadó', heat.

hogfīshi, the pokers; kēkeholtqād sázī, broken off and knotted yucca for unravelling (used in connection with pokers).

achīdidoljē, the fire will take place (lit. the fuel is stacked).

achīdādilja, the fire has been made.

sil, the steam (of boiling water).

COLOR.

The various methods of preparing dyes for wool and leather are described elsewhere. Similar use of color is made in the decoration of the arrow, of the shield, pottery, and gourd rattles, while the decoration of basketry is obtained with vari-colored twigs.

The prayersticks are colored white, blue, yellow, black, red, speckled, spotted or striped, according to ritual prescription, to represent the divinity worshipped. The colors are a mixture of water with surface coal (lējīn) for black, water and yellow clay (lētsoi) for yellow, white clay (dlēsh) for white, while the soft turquoise, or a similar stone (adishtlīsh), is pulverized and mixed with water for the blue color. The spots and stripes for some prayersticks vary according to prescription, and are obtained with any of these colors, one of which is the prevailing color on the body of the prayerstick. The colors are applied with brushes made of yucca strips.

ketā yishdlīsh (shēdlēzh, deshdlīsh), or ketā beshdlīsh (beshēdlēzh, bēdeshdlīsh), I paint the prayerstick.

tsázī ntqēli, the yucca (brush).

adishtlīsh, soft turquoise.

lētsoi, yellow clay, brimstone.

lējīn, surface coal.

dlēsh, white clay.

lagai, white; hitso, yellow; dotfsh, blue; dilqf, dark; lizhn, black; lichf, red; ketā dlnchf, the brown prayerstick with black and red stripes at ends.

biketān disós, glittering prayerstick, black body rubbed with red clay (deschf).

biketān nodōzi, its prayerstick is striped, or likhfh, spotted, as for instance, the prayerstick of the skunk or puma.

The ingredients for the colors of the sand painting are sometimes mixed with sand or dirt to allow them to flow more readily in drawing the lines. White is obtained with a kind of gypsum (tsé' lagai), which is pulverized, yellow with yellow ochre (tsé' hitso), and red with pulverized red sandstone (tsé' lichf). Black consists of charcoal (tēsh), obtained from burnt scrub oak (chēchil ntřiz), or, for the night chant, from dry cedar charcoal (dilkfs bitēsh), which is mixed with dirt (lēsh). Blue is obtained with a mixture of pulverized charcoal and gypsum added to the dirt. Vari-colored pebbles, however, are not used for the sand paintings.

These preparations are put on bark trays from which a pinch is taken between the index finger and thumb, and allowed to drop on the layer of moist sand, or the "altar," forming the foundation of the drawing. The singer usually superintends the work, directing and correcting his assistants, of whom as many as five and more are at work on the larger drawings. These are made in the hogan, and vary in size and number for the individual chants of which few, if any, are entirely without them. The patient is seated upon the finished drawing which, after various invocations and rites, is erased, and the dirt and sand removed from the hogan.

tsé' yikān (ikān), pulverized stone.

tsé' yishkā (yfkā', deshkā), I grind or pulverize stone.

tsé' lagai, native gypsum, white ochre; tsé' lichf, red sandstone (ochre?); tsé' hitso, yellow ochre.

tēsh, charcoal; chēchīl ntlīz bitēsh, scrub oak charcoal; dīlkīs bitēsh, dry (red) cedar charcoal; lēsh, or dāākēdi lēsh, dirt from the farm; sai dītlē, moist sand.

ikhā, the sand painting.

ishkhā (isēkhai, ideshkha), I draw a sand painting.

nā'āshnīl (nasēnīl, nā'deshnīl), I pass through my fingers.

ikhā nashnīl (nasēnīl, ndeshnīl), I draw (lines of) a sand painting.

ikhā ashlē, I am making a sand painting.

ikhā nnāsdzīd (nnazēzīd, nnādeszīl), I erase the sand painting.

For directional assignment of color see article on directions. In accordance with this assignment the representations of the sacred mountains, which accompany many sand paintings, are decorated in that color, namely, white for the mountain of the east, blue for that of the south, yellow for that of the west, and black for the sacred mountain of the north.

In summer the face and forehead is painted with a mixture of red clay and tallow to protect the skin from the heat of the sun, while in winter this is done as a precaution against chapped skin.

ālishchī (adeshchī, ādīdeshchī), I redden my face, paint it red.

chī, red clay; tā, grease; akā', tallow (goat or sheep tallow).

hanīchī, the face is painted red.

hanī'ézh, the face is painted black, as is done at the war dance, or as the gamblers do when the moccasin game is played after sunrise.

Animals are often distinguished from one another by their color.

mā'i, the coyote; mā'i dotlīsh, the kit-fox; mā'i litso, the yellow fox.

nashdūitso, the mountain lion; nashdūilbai, wild cat.

nashdūilkhīzh, spotted puma.

wolāzhīni, the black ant; wolachī, red ant; wolachīitsoi, yellow (red) ant.

debē līzhīni, black sheep; debēlchī, red sheep (brown); debēlgai, white sheep, etc.

lilgai (lī lagaf), white horse; lī dotfīsh, blue (gray) horse; lī litsóigi, yellow horse; lī lizhfnigi (līshzhīn), black horse; lī lichfigi, red (sorrel) horse; lī likhfīzhi, spotted (pinto) horse; lī nilqfnigi, (oily) mouse-colored horse; lī dinlchfigi (dinīlchf), bay, light brown horse; lī dīnlzhfnigi, dark bay (brown) horse; lī labá'igi, roan horse.

Or its color is indicated by its mane.

bitsfghā lagáigi, white-maned (cream or buckskin colored) horse; bitsfgha lizhfīni, black-maned; bitsfgha lichf, red-maned.

Similarly, minerals, stones, clays, and a host of other objects, are either described or differentiated by their color.

To summarize, the different colors are designated as follows:

lagaf (-lgai, -gai, -gā), white.

litso (-ltsūi, -tso), yellow.

dotfīsh (dotfīzhi, -tīsh), blue.

lizhfn (-zhīn, -lzhf, -jīn), black.

labá' (-lbaf, -ba'), gray, roan.

lichf (-chi, -lchf), red.

likhfīzh, spotted, which is used for any kind of spots; red, or black and white, white and yellow, etc.

lizhfn be likhfīzh, black-spotted, etc.

yistfīn, freckled, dotted (very small dots).

nodōz, striped (vertically); nágo nodōzi, striped (horizontally).

lichf benodōzi, red striped, etc.

dīnlchf (dīnīlchf), light brown; dīnlzhfn (dīnīlzhfn), dark brown.

dīnlgaí, light yellow, white with an admixture of yellow, a tinge of yellow; lichf dīnlgaí, pink, or red with a tinge of white; dīnlbá', stone gray, white with a tinge of black; dīnltsó, yellowish, a pale yellow.

dīlqfī, a dark, usually black color.

disós, glittering color, speckled; bīsdflīd, glossy; bīsdflīdgo āshlē, I give it a gloss, brighten it; bitsá' dīnlīd, or bitsá' dīnákā, a bright color.

nltqóli, silvery; nilqfni, oily, mouse-colored.

tqátłid nahalfnigi, like water scum, green.

tsedídé nahalfnigi, like four-o'clock, purple.

debélchf nahalfnigi, like the color of a red sheep, subdued red or brown. Other comparisons are used in a similar manner.

táyisi lichf, crimson, or táyisi lizhfn, true or fast black, etc.

The object colored is designated in a similar manner.

yilzhf, colored black; yiltsú, colored yellow; diltłizh, colored blue, etc. Variegated objects are designated by qualifying adjectives, such as,

al'a at'éli, as, aghá al'a at'éli, vari-colored wool, or altqás'al, vari-colored; altqanátsi, mixed colors.

The condition and progress of vegetation, the variety of color in a blanket or cloth, variety in a landscape, and similar qualities, are usually described by their color.

nadá yichf, (corn is red), the awn appears, corn is in blossom.

nihidígai, it is white, flowers are blooming, it is spring.

údahotso, they (the fields) are yellow, it is autumn.

yíba', it is gray, the ground is covered with snow in spots.

da'fchí, mixed with red, a strip or line of red runs through the body of it, etc.; da'fbá', a little mixture of gray; da'fgai, of white; da'fťsö, of yellow; da'fťfish, of blue; da'fjin, of black, or jfjin, a black line (on the breast of an animal).

dadzágai, a strip of white soil; dadzétso, of yellow; jichf, a strip of red soil; dajfjin, of black; dadzébá', of gray; dazhdæťfish, a strip of blue soil; tqábá'jfjin, black watermarks; tqábá'-dságai, white; tqábá'dzťso, yellow; tqábá'jfdæťfish, blue watermarks, caused by the splashing of the waves.

dzillfjin, black strip mountain. (Cf. also local names).

The particles ho (qo) or ha prefixed to color usually indicate a large circumference of landscape.

hotso (hotsói), a meadow; hálťsö, a green patch or field.

ní'hálchí, the red (lower) world; ní'hodotísh, the blue world.
 ní'hodilqí, the dark world.

Words Referring to Measure and Distance.

The length and breadth of an object is measured by the span, by the width of the fingers, or by stepping off.

yidés'ēs, a pace, as dísdín didés'ēs, forty paces.

bił kidesní, the reach, of the extended arms.

hagán biké'āgo, arm's length, from socket to tip of middle finger; agán aqádítán (gā hadítādo), elbow's length, from the elbow joint to finger; halatsín, wrist's length.

hálā nézhi, the length of the middle finger; hálā tsostsédi, the index finger; atqá'i, the fourth finger; hálā yāzh, the little finger; hálātsó, the thumb.

hálāzhōzh, fingers taken collectively. The measure is usually from the knuckles up. Expressions like ānlāes or aqénltso, as large as, are used in this connection, as hálā nézhi ílāes, so long as the middle finger, etc.

halāzhōzh atqá'i, the joints of the finger, usually the middle joint, the particular finger being mentioned in that connection.

dalaf biké, tqā biké, one or three fingertips long, for instance, a prayerstick. This counts up to ten, nezná biké, ten fingers, or the width across the knuckles of both hands, which, in turn, is equal to a span.

yílā destsód, finger span, from tip of thumb to that of the middle finger. Blankets, poles and other objects are measured by this span. When another finger is used for the span this is mentioned, as yílā destsód yílā tsostsédi be, spanned with the index finger, etc; yílā tsostsédi aqánila, folded index finger, the span from the thumb to the second bent joint of index finger.

Another measure is from the bent fingers (bíā ba'ā'āgo) of the left outstretched arm to the right nipple (bíé'). Other lengths are paraphrased by showing the size on the finger, or with a small stick and khúnlto, so large, or some similar expression.

Distances, too, are indicated by comparison, such as the distance between two well-known points, or by pointing out the time required to cover the distances, as for instance, *shā'bīghā njaghāgo*, by walking all day. At times the distance is indicated in a very indefinite manner, by words such as *nīzād*, far.

tsé sētqā, the milestone, a mile, is now used by some in designating the distance from one point to another; thus, *tqā tsé sētqā*, three miles.

Words Referring to Surface and Solid

By way of illustration, and as an aid to memory, lines are sometimes drawn on the sand. Various figures are designed in blankets and depicted in sand paintings or on prayersticks, and are now also seen on cloth and paper. The Navaho do not tattoo, neither do they write, draw or design on paper or leather.

gehésdön (*kehésdön*), or *tsahásdön*, straight, in a straight line, vertical.

nānīgo (*nāgo*), across, horizontal.

nās bās (*nāzbās*), round, circular, a circle.

nāsmās, round, spherical, globular; *numāzi*, round, globular.

alkīnās bās, a double or encircled circle.

nāzhāhi, pronged downward, semicircular (pendant).

dijól (*dījōli*), round, ball shaped.

dahitqā, crescent shaped.

alkésgiz, spiral, like a corkscrew; *alkéhenetsé*, spiral, coiled, like the tendril of a vine; *hanōtsé*, coil (a flat or conical helix, like the native basket); *nānisté*, a coil.

bāhadā'azhā, hemispherical, curved.

bīhāltā', concave, hollow, as the interior of a basket.

nōltīsh, or *nānistīsh*, zigzag or winding like a snake.

qētsōs, pointed. cardate, elliptical; *nōltīshgo qāhashchī*, oblong, with waving or zigzag lines; *qāhashchī*, oblong and tapering; *istīā'*, angular; *dalaigo istīā'*, a single angle; *dīgo istīā'*, quadrangular, in the shape of a zigzag.

dákhā (nahālin), card shaped, is used for square, accordingly áakhāni, quadrangular, a cube or square.

des'á, pointed, projecting, such as a stone or mountain, or the lobes of a leaf, as dígo des'á, four lobed (clover), or the four angles of a square; tqágo des'á, triangular.

dalaígo des'á, a right angle.

nodóz, or dōnodóz, vertically striped lines; nágo nodóz, horizontally striped lines; alnánodóz, crisscross, when the cross stripes are easily distinguishable; alnānedīz, crisscross, where the lines cross too close for distinction, consequently they are twisted or tangled.

tsīn alnāozīd (tsī' alnāozīd), crossed.

alnf na'ídzo, merely denotes a line intersecting a cube vertically or horizontally, or a cross inside; if diagonal lines are added it is alnf yilnādaosdzo, or the center with lines.

dákha nahalin qāhashčēš, or yistlīn, checkered.


nādīkī', parallelogram; qāhashchī, is a diagonal line through it; alnfgo dāzhnīltlīsh, a square with zigzag lines in the center, or aqānigo dāzhnīltlīsh, with waving lines close together, or aqānigo nēltlīsh, closely winding.

qāhashchī altsāji, or qets'ós altsāji, drawn out on both sides, as in a diamond figure; beditlī' nahalin, diamond shaped, or shaped like the native slingshot.

kōs ishchīn, cloud effect,  a triangle set upon a square.

ídēsghās, cogged, serrate; nahinestšē, flat coil.

shézhā', crooked; dēzhā', or deshzhā', pronged, as a horn.

ídeshgīzh, forked; al tqānetsē, interlocked, clutched, like the fingers or thorns, or a comb in use; nānotsē, the comb in the warp; aqīnlkhānediz, interlocked (the upper part of interlocked fingers); nāzhā, crescent shaped, curved; alchī'hāzhā', curved toward each other, as (); altsānāzhā', curved from each other, as). Similarly, bāhāzhā', hemispherical, curved, as .

aldé' baqa'i'á, semicircular, with points upward, as .

alchīshdæ bahābās, intersected semicircles, as .

aqiházhá', two semicircles of this shape: ()

alnígi, the middle, center of anything.

altsá'húntsogi, the same size all around, the center of a spherical object.

dichízh, a rough surface; dilkhó, a smooth surface.

nélzá', ridged, as in tsín nélzá', a ridged line of timber, the wavy outline of trees; qanádiz nélzá', the eyelashes are spread out; tqónélzá', a drizzling rain; daistló nélzá', the woof is undulating in appearance.

ntqél, wide; hótqél, a wide surface; t'ō ntqéli, it widens.

bagháhodzá, it is punctured, perforated; baghádaás'á', it has been perforated with an instrument, a hole.

aqídiá, an angle or point on a hard object.

aqídī'í', an angle on a soft surface.

aqídadídlínigi, an angle of streams, the meeting of arroyos.

aqídaditqínigi, the fork of a road.

nizhúnigo óqola, it is nicely made or arranged; lāgo ádlét'ágo áyolíl, he makes various new designs; nizhúnigo ó'ólíl, he makes beautiful things, he executes well.

THE NUMERAL SYSTEM

The Navaho follow the decimal system. The numerals to four differ little from other Athapaskan languages, which also present additional similarities of construction at least. (Cf. Goddard, *Morphology of the Hupa language*, vol. 3, page 32-33.) No additional terminations are used to distinguish the number of persons and things, the number being added to the object expressed, as is done with any ordinary adjective. The same exceptions, too, as with the adjective obtain with the numeral, which is placed before nouns denoting coin, nezná bésó, ten dollars. Frequently the number of objects is expressed by the dual and plural forms of the verb making specific mention of the numeral superfluous.

Few ordinal numbers exist, as the order of sequence is usually

not referred to, or if it is, the terminals are specified as first and last with the intervening objects or persons preceding or following them. Ordinarily, however, the object is specified sufficiently by description. Multiplication and repetition are indicated by the particle *di* added to the numeral, as, for instance, with the numerals from two hundred upwards.

Counting is usually done on the fingers beginning with the little finger of the left hand to the thumb, and continuing with the little finger of the right hand up to ten. If over ten the same method is repeated. At times the fingers of both hands are extended and the exact number of objects is indicated by turning the surplus number of fingers down. By way of illustration, the sequence of events, or the number of objects, is pointed out on the fingers usually by turning them down from the little finger upward.

In the moccasin game sticks, and in the stick dice game stones are used as counters (see games). Very few persons record their age by marks cut in stone, or any similar manner. Whenever occasion requires, however, some well-known historical event forms the basis for computing one's age, though recently more attention is given to the American method of computing the number of years.

THE NUMERALS.

<i>daláí</i> , or <i>lá'i</i> (<i>lá'</i>), one.	<i>lätsáda</i> , eleven.
<i>nákhí</i> , two.	<i>nakhitsáda</i> , twelve (<i>nakhi-</i>
<i>tqá'</i> , three.	<i>dzáda</i> , <i>tqadzáda</i> , etc.)
<i>dí</i> , four.	<i>tqätsáda</i> , thirteen.
<i>äshdlá'</i> , five.	<i>ditsáda</i> , fourteen.
<i>hastqá</i> (<i>qastqá</i>), six.	<i>äshdla'áda</i> , fifteen.
<i>tsöstsíd</i> (<i>tsöstséd</i>), seven.	<i>hastqä'áda</i> , sixteen.
<i>tsebí</i> , eight.	<i>tsöstsédtsáda</i> , seventeen.
<i>nahastáí</i> , nine.	<i>tsebítsáda</i> , eighteen.
<i>nezná</i> , ten.	<i>nahastáitsáda</i> , nineteen.
<i>nádín</i> , twenty; <i>nadín lá'</i> , twenty-one; <i>nadín nákhí</i> , twenty-two, etc.	

tqádīn, thirty; tqāgi lǎ', thirty-one; tqāzi nakhf, thirty-two; tqāgi tqā', thirty-three; tqāgi dī, thirty-four, etc., or tqádīn dóbā'ā dalai, nakhf, tqā', thirty-one, thirty-two, thirty-three, etc.

dīsdīn, forty; dīzi lǎ', forty-one; dīzi nakhf, forty-two, etc., or dīsdīn dóbā'ā dalaf, forty-one, etc.

ashdládīn, fifty; ashdlǎ'lǎ', fifty-one; ashdlǎ' nakhf, fifty-two, etc., or ashdládīn dóbā'ā dalaf, fifty-one, etc.

hastqádīn, sixty; hastqā lǎ', etc., or hastqádīn dóbā'ā dalaf, etc., sixty-one.

tsöstsédīn, seventy; tsöstséd lǎ', etc., or tsöstsédīn dóbā'ā dalaf, seventy-one, etc.

tsēbīdīn, eighty; tsēbī lǎ', eighty-one, or tsebīdīn dóbā'ā dalaf, etc.

nahastádīn, ninety; nahastaf lǎ', or nahastádīn dóbā'ā dalaf, ninety-one.

neznádīn, one hundred; nezná lǎ', one hundred and one; nezná nakhf, one hundred and two, etc., or neznádīn dóbā'ā dalai, nakhf, one hundred and one, and two.

nezná nezná, one hundred and ten; nesná latsáda, one hundred and eleven, etc.

nakhi di neznádīn, two times hundred, two hundred. Other numbers are added, as nakhi di neznádīn dóbā'ā dalaf, (two hundred and one), or nakhi di neznádīn dóbā'ā nezná (two hundred and ten), and so on with the following.

tqā di neznádīn, three hundred; dīdī nesnádīn, four hundred; ashdlǎ'di, hastqādī, tsöstsédī, tsebīdi, nahastáfī neznádīn, five, six, seven, eight and nine hundred.

neznádi neznádīn, or dalafdi mīl, one thousand.

nádīn di neznádīn, twenty times hundred, or nakhi di mīl, two times thousand, two thousand, and so on indefinitely, though the higher denominations are not frequently used.

ORDINALS.

atsé', or atséd (atsédi), the first one.

naákhéde, the next one; nabikhéde, the one after that, etc.

atqáigi zezíni, or atqáigi, the one in the middle, or between two others.

akhéde zezíni, or akhedéigi, the last one of a number.

lǎ'í, or lǎ' hazlí (azlí), once, or that's once; ná'áldó, another time, or nakhidí azlí, that's twice; tqádi, dídi, etc., three and four times, etc.; bígha hazlí, that is sufficient, or the last time.

do qáida, that is not enough (something more is to be added).

bédestí', it is the first in order, it begins with this, as for instance, a series of songs at a ceremony, or a certain sound (or letter) at the beginning of a word.

bedéltí' (nǎé), I begin it with this.

beyishtí' (nǎé), I continue with this; beyítí' (nǎé), this follows.

benúltí' (nǎé), I close it with this (song).

benúltí' (beníntí'), this is the closing or last one.

Unity, accompaniment, repetition, multitude, fewness, and like divisions of number, are often expressed by verbal phrases or adjectives, such as the following.

tasáha, alone, singly.

tála dinshtáhe, I do it singly, for instance, I travelled alone.

Other similar expressions are: nakhí, tqā, dí, nílťé, there are two, three, four, etc., of us.

lǎ', some, another; naná, or ná'áldó, again, once more; nanálǎ', another one; lǎ'í, many, several, not a few, or lǎ' (as diné lǎ'), many persons; tóóqoyúí (or emphasized, tóóqóyüi), very many, innumerable, a large number.

do láda, few, not many; áłchíndi, just a little, few.

al'á, divers, various, or al'á átéhi, divers kinds; altqás'af, or altqanástsi, various, all manner of; bíł tqáchā, along with, together with; tǎáqá, together, in a body; dáníłtso, all of us together; danółtso, all of you together; alnáho'já, exchange alternately! bíłilnáhashtásh, I alternate with him.

tǎázlfigi, any kind, or dadoléi, sundry things.

lǎ' is also used for any. At times any is expressed by da' huló, have you any?

Words Referring to the Various Parts of the Body

The Navaho does not practice surgery, nor is he skilled in the anatomy of the human body. As no differentiation is made in regard to the different parts of the human and of the animal body (except the specific parts), the words here listed are applicable to both.

hatsís hazhí' al'á adolyéhego, the various anatomical parts.

THE HEAD.

sítsítsín (sítsítsín), my head.	atsíyáháldsísi, the cavity in
tsítsín, the skull.	the rear of the head.
tsítád, crown of the head.	akúntí', the rear cartilages
átsíghá, the brains.	from head to neck.
átsíyá', the occiput.	atqá', the forehead.
atsíyáshjash, (lower) back	bitsítsín sítlé', a flat head.
of the head.	

THE HAIR.

The hair is scoured with yucca suds and dried in the sun. It is then dressed with a whisk made of mountain grass, and twisted and tied in a bundle on the back of the head, where it is secured by means of a hair cord. The queue was formerly wrapped and hung over the neck after the fashion of the Pueblo Indians.

tsíghá, the hair.	tsíishchíli, curled hair.
sítsí', my hair.	tsínáas, long hair.
tsídá' yanízhé, (hair stands	tsídiyü, short (cut) hair.
up), the cowlick.	tsí díchósh, stiff or stubby
bitsí dádeshzhá, dishevelled	hair.
hair (stands on ends).	bitsí bétód, (peeled off),
tsíbá', gray hair, or turn-	bald.
ing gray.	tsítád dádálchí, baldheaded.
tsíbálagai, white hair.	bitsí dānaskhād hair tuft
tsíghálízhín, black hair.	on a bald head.
tsíishbízhi, braided hair.	tsfzís, the scalp.

tsīgháshchīn, a wig (which is made of horsehair and used occasionally in ceremonies).

tsīyēl, the queue.
bitsīyēl ntsái, a large queue.

THE FACE AND FEATURES

ānf', the face.
shinf', my face.
aníkēd, (cavity of the eye),
the features.
anf' dāhishchēl, contracted
features.
ānīshjá', the cheekbone.

shinītsf', my cheek (flesh
of my face).
átl'ā', the temples.
nīshzhīn, a dirty face.
ānf'sīltsósi, a wrinkled face.
binf' nōj', a wrinkled face.

THE EYE

aná, the eye.
shiná, my eye.
ānátēsh, the eyebrow.
ānádīs, the eyelash.
anádaādīs nnæs, long eye-
lashes.
ānāshzhīn, the pupil.
ānágai, the white of the eye.
ānázīs, the eyelid.
ānátšin, eyebrow bone.
ānátqā', between the eyes,
bridge of the nose.
nīkīshqtó, the tears.
ānīkēd, the cavity of the
eye.
ānīkēd qádādeshtlīsh, I'll
give you a black eye (I'll make
your eye cavity blue).
shinákīs, the grove of my
eye.
binákīsi, or nākīsi, a one-
eyed person.

ná dotlīzhi, blue eyes.
nāshzhīn, black eyes.
nālchf, pink eyes.
biná lichf, bloodshot (red
from want of sleep).
nātsóho, big, bulging eyes.
nātsfhi, small eyes.
nāshchīl, squint-eyed, con-
tracted eyes.
nādigīsi, cross-eyed.
shinādigēs, my eyes are not
straight (crossed).
nāyai, a mark below the eye.
nākēldōhi, pink or running
eye (of a horse). This is used
to designate an albino. The
Navaho have no albinos.
biná denf, a good eyesight.
bi'līkē hulô, a defective or
poor eyesight.
shinīkē nāntī' (nt'ē), I am
blindfolded.

THE EAR

ăjǎ', the ear.

shijǎ', my ear.

ăjǎtsīn, the earbone.

ăjētīsh, the eardrum.

ăjéchīn, the earwax.

shijǎ nāt'ŷ', my auricle.

THE NOSE

ăchf', the nose.

shichf', my nose.

chīsh yǎzhe, a small nose.

chī' nǎzi, a long nose.

chīsh dīli, a fat nose.

chīsh tqéli, a round, broad
nose.

chī' dēdā'āni, a pug-nose.

chīshclīfd, a flat nose.

chīshqǎli, a club nose.

chīshchó, a ball nose.

chī' ádini, a flat, very flat
nose.

chī' hakáli, aquiline nose.

ăchfshgêsh, the nasal bone.

anf', the nostrils.

chīshťǎ', the interior of the
nostril.

bichf' bilátqǎi, the tip of
the nose.

nǎshťql, mucus (snot).

binf' hodit'ŷ', hair in nose.

THE MOUTH

sizé, my mouth.

ătsó, the tongue.

azāhǎťǎqi, the palate.

ăzǎgi, the esophagus.

ndísdsi, the breath.

ăzhé, froth or foam.

shē', spittle, saliva.

THE TEETH

ăwhó', the tooth, molars.

ăwhókis, tooth groove.

ăwhótsi', the gums.

ăwhóshzhǎ, the eyetooth.

ătqǎwhō, the middle tooth,
aside of the eyetooth.

ăwhóshtlǎ', the interior of
the cheek.

ăwhóshtlǎgi, the last tooth
(appearing at the age of
twenty-one).

ăwhóchǎn (ăwhóchqān), tar-
tar.

nlťsfń, bright or crystal,
the glaze of the teeth.

THE VOICE.

ĩñé, the voice.	bizhí' dádeshzhă, a rough,
bizhí', the voice.	unmusical voice.
bĩñé nzhũni, a clear, pleasing voice.	bizhítso, a loud voice.
bizhí' bǐgĩs, a good voice.	bizhí' altsósi, a weak voice.
bizhí' nchũ'i, a poor voice.	bizhí' nłchũn, an ugly voice.

THE LIP

sizábâ, (the rim of my mouth), the lips.	ayáigi áďá', the lower lip.
áďá', the lip.	dághā (shidághā), the mustache.
áďáigi áďá', the upper lip.	

THE CHIN

The hair of the chin are scrupulously removed by means of a pair of tin tweezers. The beard is exceptional with the Navaho.

áyātsĩn, the chin or jaw-bone.	of the jaw (below the ear).
shiyatsĩn, my chin.	bidágha (dághā), his beard (in reference to Americans).
áyātsĩn des'áigi, the tip of the chin.	baghádānaskhád, a tuft of hair below the chin.
áyātsĩn bihĩ'áhigi, the joint	

THE NECK AND THROAT

khős (k'ós), the neck.	ázól dă'dijóli, (trachea), the windpipe.
k'ós nēs, the long neck.	áďájōzh, the epiglottis, the tonsils.
sők'ós, or sizénagha, my neck.	áťúg, the collarbone.
áďáyĩ', the throat.	oshgēsh, the cartilages.
ázól, Adam's apple, and vocal chords.	khős, the cough.
ázági, the esophagus.	

THE ARM

āgān, the arm.
 shāgān, my arm.
 āwhōs, the shoulder.
 āgāstsīn, the shoulder-blade.
 achāiya, the armpit.
 āgālō', the upper arm.
 agāyāi, the forearm.
 adō', the muscles.
 ōzhlā', the elbow.
 āchōzhlā', below the elbow,
 the crazybone.
 ālatsīn, the wrist.
 alātsīn, the wristbone.
 yilā', the hand.

ālātīā, the palm of the hand.
 halatīā hāldzīs, the cavity
 at the base of the thumb.
 shīlā', my finger.
 ālātso, the thumb.
 hāla tsōstsēdi, (the seventh
 finger), index finger.
 hāla nēzhi, the middle fin-
 ger.
 hālatqāi, the fourth finger.
 hāla yāzh, the little finger.
 ālāshgān, the fingernail.
 ātsōs, the veins.

THE BODY

āzhī', the body.
 shizhī', my body.
 ātqā', the body.
 sitsā', (box), my body.
 sitsīs, the frame of my body.
 sitsāōz'ā', the members of
 my body.
 ātsī', the flesh.
 ākhāshtīōl, the hair on the
 human body.
 āchīn, the pores, or the dust
 that settles in them.
 dīl (shidīl), the blood.
 tsīn (tsn), the bones.
 oshgēsh, the sinews.
 atśīd, the sinew.
 āqādītān (āqādadītā), the
 joints, ligaments.

āwōl (āwūl), the marrow.
 tsōs (ātsōs), the veins and
 nerves.
 ātsōs, artery, vein.
 ātsōstso, the arteries, larger
 veins.
 akāshjā, the hip, the ilium.
 atśōskīd, the thigh, the leg
 above the knee.
 ākaī (shakaī), the hip.
 āyīd, the breast (sternum
 with ribs).
 shitqél (atqél), my bosom,
 breast or front.
 shinā'ēde, my back.
 shināghadé, (from) my
 back.
 shōshkīs, or sikīs, my side.

ăjëitsîn, the chest, the bust.
 dîtľô, hairy.
 ätsá, the nipples.
 ätsá, the ribs.
 ätsă, the navel.
 ákhági (shikhági), the skin.
 bitqáhodichfzh, rough skin.
 bitsín, a skeleton.
 sǎgǎn, bony (dried out).
 ăbíd, the stomach, the belly.
 achági, the abdomen.
 ăchúg, the genitals.
 ăchúg bizíz, the scrotum.
 zíz (bizíz), is also used for
 the penis.
 ăzíz bakhági, the foreskin.
 ăchúg biyézhí, the testicles.
 jōzh, the vagina.
 ăjilchí, the anus.

ľish, the urine.
 chă, ordure.
 ätlă', the buttocks.
 tľíd, the gas.
 ighán, ishghán (shīghán),
 the small of the back, the
 spinal column.
 ishghánshkǎn, vertebræ and
 spine.
 ighán ăqâdět'áni, vertebral
 joints.
 ighán dêtsági, the ribs con-
 nected with spinal column.
 ănágha, the back.
 ănághăhi, the loin.
 ănf', the waist.
 săes, a wart.
 qís, the pus.

THE VITALS

âjái (shijéi), the lungs.
 ăjëilzôli, the lobes of the
 lungs.
 ajëidľshjōł, the heart.
 jeidľshjōł bizís, the pericar-
 dium.
 ăghás (sághăs), the esoph-
 agus (lower).
 atsá, or atsági, the bowels.
 abíd, the stomach.
 ăchlí, the intestines.
 ăbíd ikhíni, or ăbíd dishjóli,
 the small intestines.

ăzíd, the liver.
 ätsáshjish, the liverbag.
 ätsáshkǎshi, the kidneys.
 ätlľish, the gall.
 ätlľish bizís, gall bladder.
 ălízhsís, the bladder.
 atsfl, the womb.
 chōyín, menstruation.
 ätsástqín, the fetus (also
 used for abortion).
 awé biyaláí, the placenta,
 afterbirth.

THE LEG

ăjád (shijád), the leg (femur).	ătsôstso (tsôstso), the arteries of the leg.
ăjâskhîs, the lower leg.	ăwhôd (showhód), the knee.
ăchôsh, the calf of the leg (tibia).	ăwhúd dâstân, the kneepan.
ăjâstqîs, the shin (fibula).	

THE FOOT

khě (shikhě), the foot.	ăkhě yâzh, the little toe.
ăkhénî', the instep.	khægúdi, short-footed.
ăkhétľă, the sole.	khě yistqîn, a frozen foot.
ăkhétqāl, the heel.	khěshgüli, clubfooted.
ăkhétsîn, the ankle (bone).	khěwhűz, a bunion.
ătsâtsîd, tendo Achillis.	khébâ ntľîsgo dă'naznľligi, (the ridges of the toes are hard) corns.
ăkhéshgân, the toenail.	
ăkhézhôzh, or ăkhě dinîbí-ni, the toes.	khěkě', footprints.
ăkhétso, the big toe.	bikhétso ádin, a missing toe.
ăkhě nézhi, the second toe.	bikhě sîľľě, a flat foot.
ăkhě nfî', the middle toe.	khějöl, a ball foot.
ăkhétqă'i, the fourth toe.	ăkhétsî' or behétsî', ankle.

Words Referring to Disposition and the Faculties

yâaqalyá', he is careful and sensible.
do-aqalyáda, careless, foolish; t'ôdôôqalyáda, he has no sense.
t'obínî' ádin, a brainless fellow, a dunce.
tsídesyis, timid, or I am frightened.
do-iníniáda, or t'ôqodîgis, absent-minded.
altqăhanáshdonîľ, an unsettled, changeable disposition.
do-bíneshdlída, I take no interest.
do-ădlínædlída, he takes no interest, hâs no ambition.
ădlínædlî', ambitious, he has ambition.
ayúit'ægo yínædlî', he takes much interest.
săé'id, I am nauseated, disgusted.
asăé'id, complete nausea, I am disgusted.

aidél (property) yichá yidélñí, an avaricious, miserly person, one who amasses a fortune.

qágo shí alái yolíl, insatiate, unusual desire for wealth.

biłnáhuntlá, or tódigís, an awkward person.

hantsíkhæs ádín, he has no brains; ntsíkhæs, a thought, an idea.

bentsíkhæs, his mind or opinion; shi ntsíkhæsi, what I had in mind; bikégo ntséskhæsi, my soul, that is, that which prompts me to think; ntsísíkhæsi, through which I think, my soul.

bantsískhæs (bantsisékhæs, bantsídeskhös), I think, as in qat'ish bantsíníkhæs, what do you think of it?

níssín, or nsín (nt'é), I think, I desire.

baāqænsín (baāqænízf, baāqædfnesíl), I am grateful for it.

lænsín (lænízf, lædfnesíl), I am jealous of.

shił báhozín, I know it; shił báhōzín, I knew it; shiłbáhodozíl, I will know; shiłbáhōzín dolél, I shall have known.

shiłbáhozín nt'é, I used to know, I have known.

shił báhozí laná, I wish I knew; shił báhodozíl dātsí? may I learn what it is?; nił lá báhodozíl, you may!

Usually these forms are abbreviated: do-bá'sinda, or do-bá-sinda, I know him or it; básínísh? do-yáhōzinda lá! know it! it isn't known! nobody knows; shéhodílzín (shéhodílzín nt'é, shéhodíldozíl), I am, was, and will be known.

shéhōzín (nt'é), this is known to me, as do-náhōzinda lá, you are not known here.

qá'dinsh'f (qá'dél'í, qá'dídesch'f), I learn his character, I find him out; bídinsh'f, I learn of it.

qá'shidíl'f (qá'shidél'í, qá'shidíldól'f), I am caught in the act.

shijá shidijíl (shijá shfdijíl, shijá shídídojíl), I hear of it in time, or shijá ózní, I took the hint, I got news of it.

qadishchíd (qádeschchíd, qádídeschchíl), I make a gesture.

nashchíd (nshéłchíd, ndeshchíl), I make gestures; naqáishchíd (naqáılchíd, naqaádeschchíl), I point out to another; náishchíd (náılchíd, naádeschchíl), I point at it.

aqéshkhád (aqisékhád, aqídeschkhál), I applaud, clap my hands.

SEEING

- yish'f, I see it; nél'ī, or yīltsá, I saw it; yidestsél, I will see it.
 yistsé' (yīltsá, yidestsél), I see it.
 desh'f (dé'ī, dīdesh'fī), I look at it; t'áji desh'f, I look back.
 chæqadesh'f, I overlook, or search in vain for it.
 qādish'f, I search for it; tqādish'f, I go about searching.
 hanshtqá (hanétqā, hadīnéshtqāl), I look for it; chæhanshtqá,
 I could not find it; nakhānshtqá, I look for you.
 nesh'f (nél'ī, dīnesh'fī), I look at it.
 ādīnesh'f (adīnesh'ī, ādīnesh'īl), I look at myself.
 naitlsé, it appears, it is seen at times.
 shidoťī, (shidīltsá, shidīdołtsél), I am seen at a place.

HEARING

- adistsá', I hear, I know; adists'f (adisétšā, adīdests'fī), I hear it.
 īsistsá' (Fut. idéstšīl), I listen; īsīnłtsá', listen!
 daīstsá', they pay attention.
 yīstsá' is also used in the meaning of "it is reported," as
 qūisqf yīstsá, his death is reported or rumored.
 nā'īltsá' asæzī, or yikā'īltsá', a gossip, eavesdropping.
 zōz ītsā', a buzzing sound.
 nā'āshchīzh (nt'æ, and nāshéłchīzh, nā'deshchīzh), I make a noise.
 āqodiszé (aqodīzē, āqodīdészi), I am quiet, noiseless.

TOUCH

- nīshnī (nsénī, ndeshnī), I feel it, I have the sensation.
 nānshnī (nanénī, ndīneshnī), I touch it or him.
 bīdinshnī (bīdinshnī, bīdīdeshnī), I touch or feel it.
 nnshīsh (nūshīsh, ūdēshīsh), I touch with a stick.
 nnstsé (nūtsī, ndéstsi), I touch or poke with a stick.
 nanshqīl (nanéyīl, ndīneshqīl), I push or shove him.
 nanūshqīl, I shove you.
 bīdīshnī (bidēshnī, bīdīdeshnī), I caress or rub it.
 ādīdishnī (ādīdēshnī, adīdideshnī), I rub myself.

disdsīl (désdsīl, dīdésdsīl), I lift it, pull a string.
 ndās, it is heavy; yīlzhōli, it is light.
 shakāshjā adishnī (adēshnī, adīdēshnī), I hold my hands akimbo.
 alnāndinshnī (alnāndinshnī, alnāndīdeshnī), I fold my arms.
 qanāshchīd (qanāchīd, qādeschchīl, or qanādeschchīl), I scratch
 it out with my fingers.

SMELLING

yishchín (shēlchā, deshchīl), I smell it.
 bitqā'āshchín (bitqāshēlchā, bitqadeschchīl), I sample foods by
 smelling; lakhān shīhāchín, it smells good to me.
 do-hālchīnda, he can not smell, or, it is odorless.
 lakhān hāchín, it has a sweet smell; dokōzh hāchín, it has a
 sour smell; dīchī hāchín, it smells bitter (such as tsā', sage-
 brush); dīldzīd hāchín, it has a rotten smell; īlkhō hāchín, its
 smell produces a sensation of vomiting (as with rank food, etc.)

TASTE

yishī (sēlī', deshī), I taste it; ashī (nt'é), I taste of.
 bitqāāshī (bitqāsēlī', bitqādeschchī), I sample by tasting.
 do-halnīdā, it or he is tasteless.
 lakhān halnī (nt'é), it has a sweet or pleasant taste.
 Other words are formed similar to those listed under smelling,
 such as dokōzh, sour; dīchī, bitter; dīldzīd and īlkhō halnī,
 decay and vomiting taste.
 dāmā, or dībīd, an appetite; do-dāmāda, do-dībīda, without
 appetite; dīnshbīd (nt'é), I have an appetite; chīyā bēshbīd (nt'é),
 I have a very good appetite; chīyā yēlbīd, he has a good appetite.

EATING

ashā (iyā, adeshīl), I eat; ash'āl (f'āl, ādesh'āl), I chew; yish'āl
 (yf'āl, desh'āl), I chew it; astsē' (fītsē', adestsē'), I eat a gruel;
 īishtlē (iyētlē, diyētlō), I eat gruel; tqādīshī (tqadīyā, tqādīdeshīl),
 I eat very little, I taste of food.

nanstsód (nańłtsód, nádestsól), I give you food.

tšín bëshqăsh (băghăzh, bîdeshqăsh), or tšín bîdishtă (bîdeshtă, bîdîdeshtă), I gnaw at a bone.

yishnăd (yŷlnăd, deshnăl), I lick it.

nanshnód (nanénód, ndîneshnôl), I lick it.

nănnshnód, I lick you.

yishchăl (yŷlchăl, deshchăl), I lap (water).

(Cf. Navaho Foods.)

SWALLOWING

ishné (ŷnă, âdeshnă), I swallow it; chăishné (ntăé), I tried to swallow; chăedahishné (ntăé), I cram my mouth.

aqishné (aqélănă, aqîdeshnă), I gulp the food.

i'disdsî (îldésdsî, îldîdesdsî), I stifle with food.

shiyf' bîchîsh (shiyf' bîshchîsh, shiyf' bîdochîsh), food irritates my throat; shîdîtgă (shîdîtgă, shîdîdotgă), I hawk it up.

edîqăho dîdîshkhó (ntăé), I clear my throat.

shîdăyî' nănsdzîd (nanéldzîd, ndinésdzîl), I gargle my throat.

SPEAKING

yăshtqî (yăltqî, yădeshtqî), I speak.

do-yăltqîda, he is dumb; bitsô yeyăltqî, he stammers, he speaks with his tongue, or do-hatsî yăshtqîda, I lisp; biyîgo yăltqî, he whispers. Whispering is not practiced frequently.

qasdsî (hasdsî, qadesdsî), I reply, answer; shichî handsî, speak to me, answer!

bîlqashnî (bîlhüeshnî, bîlhodeshnî), I tell, inform him.

dishnî (dînîd, dîdeshnîl), I say, tell; ndishnî, I tell or order you, as hăkhô nlnî, he tells you to come; âtă' shîlnî jîn, he says he asks me to wait; jinî, or jîn, they say, it is reported.

altănsdsî (ntăé), I stammer.

îdishchî (ntăé), I coax him.

ădahash'nî (ădahosîs'nî, ădahodesh'nî), I boast of myself.

qadish'ă (qadîă, qadîdesh'ăl), I intone a song.

díchāl, the talker; qádishchāl (nt'áe), I talk much.

sād, a word, language, speech.

diné bizād, the Navaho language; nakhaí bizād, the Spanish language; belagána bizād, the English language, or dinékě, nakhaikě, belagánakě, in Navaho, Mexican, English.

haní', a story, a legend; bási haní, legend of the games.

diyínkěgo haní, the legends of the holy ones, etc.

bízhí, a name, a word; yinshí (yfzhí', yideshí), I utter.

nizhúnigo, yātégo yuzhí', he articulates, pronounces well.

bizhí' nchú'i, coarse language; bizhí' deshzhá', coarse, indecent language.

sād altqāhānāshdlil (nt'áe), I change my language, or sād altqāhanāyodlil, he is freakish, inconsistent, capricious, whimsical.

SIZE AND DIMENSION OF BODY

nēsél (nēyá, dinesél), I am growing.

ninnsé (ninúsá, ndinesél), I continue to grow, I grow larger.

hínshkaf (nt'áe), I gain flesh; bitsíni, it is thin; sagán, it is dried out, bony; jobá', it is poor, emaciated.

nanshchād (nánichād, ndfneshchāl), I am satiated (swollen again).

yaāshné (yaāsdsá, yaādeshníl), I stoop, lower myself.

yayistqás (yayítqás, yadestqás), I stoop.

tāyistqás (tāsétqás, tāyidestqás), I bend my back, bend back.

útsi dinshgyé (útsídínógö, ntsídideshgö), I bend my knee, I kneel; nikhí dins'es (nikhí dins'éz, nikhí dides'is), I genuflect.

WORDS REFERRING TO VARIOUS ACTIONS.

SITTING

nshdá (nedá, díneshdāl), I am seated, I take a seat.

ní'ginshdá, I sit on the ground; nanshdá, I resume my seat, I sit down; bikidā'nshdá, I mount a horse.

nshkhé (nékhe, díneskhel), I sit down with you.

Similarly, ní'ginshkhé, I sit on the ground with you; nanskhé, I sit aside of you; bikida'nshkhé, I mount with you.

sedá (nt'é), I am sitting, or a bird is sitting, roosting; or, it is there; setqí, it is there (a shovel or gun); selá, it is there (a rope).
 sakhád, it is there (a melon, or bunch of grass or trees).
 sá'á, it is there (a single object, as a tree, wagon, box).
 séltsōs, it is there (a blanket); lī sezí, a horse is there.
 shijád alķídayishlé (alķidasélā, alķidadeshlél), I cross my legs.
 tsé'yā nshtqé (sétqí, dineshtqél), I lie flat on my face.
 tsé'daig sétqí, I lie flat on my back.
 ndishdá (ndisdsá, ndīdeshdál), I arise.
 nádishdá, I am convalescent; sézí (nt'é), I am standing.

GOING

nashá (naséyā, ndeshál), I go, walk.
 lībe nashá, I go horseback; shiá be nashá, I wear these clothes.
 chánashá, I leave; t'ádo chánasháhi, I did not leave home.
 áčhánashá, I separate quarreling parties, mediate between them.
 bikenashá, I follow him; bikínashá, I step on it.
 tqáyí'nashá, I wade a stream; banashá, I do something, I am busy; do-banasháda, I am doing nothing; tsí'nashá, I am drunk, crazy (from worry; drink, etc.)
 t'ayídi go nashá, I passed close by; á'tá' nashá, I go to warn another, I warn him; áníd (áni') nashá, I am young.
 nashdá (nasdzá, ndeshdál), I go.
 yaánáshdá, I enter slowly; ádanashdá, I come down, descend.
 hoká hanashdá (hazésdza, hadeshdál), I go up a hill or mountain.
 nashdál (nansdzá, nādeshdál), I return.
 dishá (dīyá, deyá, deshál), I go, walk; chāedishá (chādeyá, chāedeshdál), I am tired; tsí'dishá, I am drunk, crazy.
 tqādishá (tqādīyá, tqādīdeshál), I go or wander about.
 chīnshá (chīnīyá, chīdeshál), I leave, go out for.
 naghāngo chīnshá, I pass your house.
 shinīshá (shinīyá, shīdeshál), I arrive.
 ndanshá (ndānīyá, ndādeshdál), I head you off.
 ntsashá (ntsānīyá, ntsādeshdál), I leave you, separate from you.
 nikhīnshá (nikhīnīyá, nikhīdeshdál), I go or leave for home.

nikhēnshdā (nikhēnsdzā, nikhēdeshdāl), I leave for home.

chēnshdā (chēnsdzā, chēdeshdāl), I step outside.

yoishā (yoīyā, yoādeshdāl), I go away, leave (abandon my wife).

nchāishā (nchāiyā, nchāideshdāl), I save or protect you.

qashā (qāyā, qadeshdāl), I come up, or out of.

nanfgo qashā, I walk aside.

akhashā (nt'ē), I visit a brothel.

tākhashā (nt'ē), I roam or tramp about.

baghā, or hokā hashā (hasēyā, hadeshāl), I go on the mountain.

yishā (yīyā, deshāl), I go, walk.

shīē bīyishā, I go in my coat, I wear my coat in going.

tqayishā, I enter the water, I ford a stream.

yishāl (nīyā, deshāl), I go, walk; t'ān' (dān') yishāl, I foot it.

tsé'nā' yishāl, I cross a stream.

shikhē yādī'āgo yishāl, I go on tiptoes.

adashā (adayā, adadeshdāl), I dismount.

bīnī'tashā (bīnī'tasēyā, bīnī'tadeshdāl), I walk or foot it on an impassable road.

nīldish'āsh (nīlnā'āzh, nīldesh'āsh), I go with you, we leave or go together.

nīldā'āsh (nīl'fāzh, nīldesh'āsh), or nīlnash'āsh (nīlnshā'āzh, nīlndesh'āsh), I accompany you, or nīlnānsht'āsh (nīlnānsht'āzh, nīlndesht'āsh), I go with you, for instance, nīlnī'nānsht'āsh, I enter the ground or a mine with you.

nīlnikhēnsht'āsh (nīlnikhēnsht'āzh, nīlnikhēdesht'āsh), I return home with you.

nīlchēnsht'āsh, I accompany you outdoors.

nīl āldānsht'āsh, I meet you.

nīl aqānsht'āsh (nīl aqansht'āzh, nīl aqādesht'āsh), I come to an understanding with you.

nīlyish'āsh (nīlnā'āzh, nīldesh'āsh), I accompany you, I walk with you.

(nīl)qanāshht'āsh (qashīshht'āzh, qādesht'āsh), I go up with you.

nīlt'ndesht'āsh (nīlt'nānsht'āzh, nīlt'ndesht'āsh), I return with you.

WALKING AND STEPPING

dīdis'és (dīdés'ēz, dīdés'is), I step off, I measure with steps.

ndīns'és (ndīns'ēz, ndīdés'is), I step; ndīnshtqāl (ndīnshtqāl, ndīdeshtqāl), I make a step, I walk.

yīs'is (īs'iz, ndes'is), I walk slowly, noiselessly.

nās'is (īs'is'iz, ndes'is), I walk about noiselessly.

īyestśī (nt'ée), I walk on tiptoes; naistśī (nt'ée), I walk about on tiptoes; nanshtl'ish (nt'ée), I wriggle; nādīnshkhād (nt'ée), I sway; yishchāl (nt'ée), I bound.

shiñāhāsīyis (shiñāhāyiz, shiñāhōdoyis), I am perplexed.

qōlñāhāsīyiz, he gyrates (in a snow storm).

nanshtl'á' (nt'ée), I have a defect, I am awkward in walking.

bā'danahaz'āni, physical defects.

RUNNING

ishyéd (ishwhūd, idéshwhūl), I run.

tqatl'á'ishyéd, I run in or under the water (rarely and ceremonially); yóishyéd (yoéshwhūd, yóādeswhūl), I run or go away.

ndishyéd (ndishwhūd, ndīdeswhūl), I run.

adishyéd, (adishwhūd, ādīdeswhūl), I beat him in running.

nādishyéd, I beat you in running.

azís bedishyéd (bedéshwhūd, bédeshwhūl), I run a sack race.

nshyéd (úshwhūd, ndeshwhūl), I run it down.

ninshyéd, I run you down.

nashyéd (nāshwhūd, ndeshwhūl), I run.

nānashyéd, I run again; yaānashyéd, I run in, re-enter.

nāshwhūl (nānshwhūd, ndeshwhūl), I run, for instance, hoghāngo nāshwhūl, I run home.

yishwhūl (úshwhūd, deshwhūl), I run, for instance, ntśāji yishwhūl, I run from you; nikhé yishwhūl, I run after you, or, bikégi yflāghūl, he runs behind him, or yil'aqá aqinolchéł, they run a tie, they run together, he runs with him.

ni'l'alghādishtāsh (ni'l'alghādeshtāzh, ni'l'alghādīdeshtāsh), I run a race with you.

dījād, fleet of foot; dinshjād (nt'ě), I am strong on my feet.

dīlāwhō', very fleet; dinshwhō' (nt'ě), I am a good runner.

dā'nshjfd (dā'něshjīd, dā'dīneshjīl), I jump.

t'āji dā'nshjfd, I jump back.

nahashchā' (nahisīschā', nāhideshchā), I hop.

FINDING

bikīnshā (bikīnīyā, bikīdeshāl), I find a thing.

Frequently words denoting "picking up" are employed in expressing "to find" an object.

ndish'ā (ndī'ā, ndidesh'āl), I find a hat, pick it up.

ndishlē (ndīla, ndīdeshlēl), I find a rope; ndishjá (ndījā', ndīdeshji), I find some corn; ndishtqf (ndītqā, ndīdeshtqfl), I find a gun; ndish'nīl (ndī'nīl, ndīdeshnīl), I find several objects; ndishtqé (ndīltqī, ndīdeshtqél), I find a horse; yā ndishtqé, I pick lice; ndistsós (ndīltsōs, ndīdestsōs), I find a blanket.

Similarly, nádish'ā, etc., are used to express finding or picking up again.

qanānīshqtā (qananētqā, qanandīneshtqāl), I find it again.

nakhānānīshqtā, I find you again.

shināhosht'ě (shinahisēl't'ě, shinaidesht'él), I locate it finally.

BRINGING

yish'āl (nā'ā, desh'āl), I bring a box or coin.

qanī' yish'āl, I bring the gossip or news.

yishjá (njā', deshji), I bring grain or sugar.

yishlē (nlā, deshlél), I bring a piece of leather.

yislōs (nlōs, deslōs), I bring a horse.

yish'esh (nī'ēzh, desh'ish), I bring two horses.

yishkhā (nākhā, deshkhāl), I bring a liquid.

yishqél (niyī, deshqél), I bring or carry anything.

yishtqfl (ūtqā, deshtqfl), I bring a gun.

yishól (nshōd, deshól), I bring a bulky object.

yishjól (njōl, deshjól), I bring a bundle of hay or wool.

yishtqél (nltqī, deshtqél), I bring or carry a baby.

yishjǎ (ǎljǎd, deshǎjǎ), I pack anything.

yistsós (ǎltsós, destsós), I bring a blanket.

CARRYING

nash'ál (naná'â, ndesh'ál), I bring or carry a box.

nashǎ (naǎjâ', ndeshǎ), I carry sugar; nashgél (naǎshgǎ, ndeshgél), I haul a load.

nashlél (naǎla, ndeshlél), I carry leather.

naslós (naǎlós, ndeslós), I lead a horse.

nash'ish (nanf'ēzh, ndesh'ish), I lead two horses.

nashkhál (nanákhâ, ndeshkhál), I carry a liquid.

nashtqǎ (naǎtqâ, ndeshtqǎ), I carry a gun.

nashól (naǎshōd, ndeshól), I carry a bulky object.

nastsós (naǎltsós, ndestsós), I carry a blanket.

nashjól (naǎhjōl, ndeshjól), I carry hay or wool.

nashtqél (naǎltqǎ, ndeshtqél), I carry a mutton or beef, or baby.

GIVING

nansh'á (naná'â, ndesh'ál), I give you a coin.

nanshjâ (naǎjâ', ndeshǎ), I give you some sugar.

nanshlé (naǎla, ndeshlél), I give you a quirt.

naslós (naǎlós, ndeslós), I give you a horse.

nansh'ésh (nanf'ēzh, ndesh'ish), I give you a pair of horses.

nanshnǎ (naǎnǎl, ndeshnǎ), I give you a variety of things.

nanshtqǎ (naǎtqâ, ndeshtqǎ), I give you a gun.

nanstsós (naǎltsós, ndestsós), I give you a blanket.

nanshtqé (naǎltqǎ, ndeshtqél), I give you a sheep or horse.

Similarly, nanansh'á, etc., I return it to you.

ACQUIRING, HAVING, KEEPING

nash'á (nasá'â, ndesh'ál), I get a coin in one way or other.

nashjá (nashéjâ', ndeshǎ), I have some grain.

nashlé (naséla, ndeshlél), I possess a quirt.

naslós (nasélós, ndeslós), I get a horse.

nash'esh (nashé'ēzh, ndesh'ish), I have two horses at my disposal.

nashníl (naséníl, ndeshníl), I acquire several things.

nashtqí (nsétqâ, ndeshtqíl), I possess a gun.

nashtqé (naséltqî, ndeshtqél), a horse came into my possession.

nastsós (naséltšós, ndestsós), I have this blanket.

t'ā nash'á, etc., expresses I keep it (after acquiring).

ASSORTING, SELECTING, SEPARATING, ETC.

altsásh'á (altsá'â, altsádesht'ál), I sort coins.

altsáshjá (altsájâ, altsádeshtji), I sort grain.

altsáslōs (altsálōs, altsádeshtlōs), I separate a horse from a herd.

altsásh'esh (altsá'ēzh, altsádesht'ish), I separate a couple of horses.

altsáshkha (altsákhâ, altsádeshtkhál), I pour liquid in either vessel.

altsáshlé (altsála, altsádeshtlé), I put a whip aside.

altsáshtqî (altsátqâ, altsádeshtqíl), I separate a shovel from others.

altsáshōd (altsázhōd, altsádeshtōd), I sort pumpkins, select some.

altsáshníl (altsáníl, altsádeshtníl), I separate several objects from a number.

altsástsi (altsáltsi, altsádestsi), I remove a hair or two.

altsástšós (altsáltšós, altsádestšós), I sort or select a blanket.

altsáshtqé (altsáltqî, altsádeshtqél), I select a sheep.

altsáshjōl (altsáljōl, altsádeshtjōl), I sort wool.

altsáshkhál (altsákhāl, altsádeshtkhál), I splice a stick. (Cf. Navaho houses et alibi, for additional words.)

altsáshashjōl (altsáháljōl, altsáidéshjōl), I sort wool.

altsáyish'á, I assort hats; altsáyishlé, I assort leather. For additional roots and past and future forms cf. bīyish'á, under "Placing."

altsānshníl (altsāníníl, altsádeshtníl), I put several things apart.

ndash'á (ndasá'â, ndadesht'ál), I set stones apart. Similarly, ndashjá (ndashéjâ, ndadeshtji), grain; ndashlé (ndaséla, ndadeshtlé), two ropes; ndashtqí (ndasétqâ, ndadeshtqíl), two sticks;

ndashód (ndashéshód, ndadeshól), melons; ndashníł (ndaséníl, ndadeshníł), I scatter, or set several things apart; ndastsós (ndaséłtsós, ndadestsós), I put blankets apart; ndashtqé (ndaséłtqâ, ndadeshtqél), I drive two sheep from a herd.

PLACING

nns'há (nná'â, ndesh'ál), I place a coin.

nns'hjá (nújâ', ndeshji), I place grain.

nnskhâ (nnâkhâ, ndeshkhál), I place a vessel with liquid.

nnsłé (núła, ndeshłél), I place a rope.

nnsłós (núłós, ndesłós), I lead a horse to a place.

nnish'ésh (nnf'ēzh, ndesh'ish), I lead two horses.

nnsnńł (núńł, ndeshńł), I place several objects.

nnshtqé (núłtqâ, ndeshtqél), I place a beef.

nnstsós (núłtsós, ndestsós), I place a blanket.

The above are similarly qualified as follows:

chinnshhtqé, etc., I put a horse out, eject it.

nlá'di nnshtqé, I lead it yonder.

năjł, or nă'di nnstsós, I put a blanket away, etc.

bī'nash'á (bī'ná'â, bī'ndesh'ál), I place a stone in a box or wagon.

bī'nasłós (bī'nálós, bī'ndesłós), I lead a horse into a stable.

bī'nash'ésh (bī'nâ'ēzh, bī'ndesh'ish), I put two horses into a stable.

bī'nashjá (bī'nájâ', bī'ndeshji), I put sugar into a sack.

bī'nashłé (bī'nála, bī'ndeshłél), I put the quirt into a box.

bī'nashgyé (bī'nâshgî, bī'ndeshgél), I carry it into the room.

bī'nashtqł (bī'nátqâ, bī'ndeshtqł), I carry a stick into the wagon.

bī'nashńł (bī'nâshńł, bī'ndeshńł), I place several things into it.

bīyish'á (bīyf'â, bīdesht'ál), I place a stone into a box.

bīyishłé (bīyfla, bīdeshtłél), I place a strap into a box.

bīyishjá (bīyfjâ', bīdeshtji), I place grain into a sack.

bīyishtqł (bīyfłtqâ, bīdeshtqł), I put a gun into a box.

bīyislós (bīyflós, bīdesłós), I lead a horse into a field or stable.

bīyish'ēsh (bīy'ēzh, bīdesh'īsh), I lead two horses.

bīyishnīl (bīy'īnīl, bīdeshnīl), I place several things into a box.

bīyistsós (bīy'ītsōs, bīdestsós), I put a blanket into a sack.

bīyishjól (bīy'ījōl, bīdeshjól), I sack wool.

bīyishtqé (bīy'īltqī, bīdeshtqél), I put a mutton into a sack.

bīhishjól (bīqéljōl, bīhidēshjól), I sack wool or hay.

lēyish'á, and other forms, express placing in the ground, burying leather, sticks, grain, blankets, etc.

REMOVING, TAKING OUT, EXTRACTING

bikinash'á (bikiná'á, bikīndesh'ál), I take a stone out of a wagon.

For various other forms see bī'nash'á, placing into a receptacle.

ghānshtá (ghānshtá, ghādeshtál), I remove a box, take it away.

ghānshdlé (ghānshdlá, ghādeshtlé), I remove a quirt.

ghānshjá (ghānshjá', ghādeshti), I take the grain away.

ghānshtqí (ghānshtqâ, ghādeshtqī), I remove a gun.

ghānshgyé (ghānshgī, ghādeshtgél), I remove a sack of wool.

ghānsh'nīl (ghānsh'nīl, ghādesht'nīl), I remove a variety of objects.

ghānshtqé (ghānshtqī, ghādeshtqél), I take a horse away.

ghānshjól (ghānshjōl, ghādeshtjól), I remove a bale of hay.

ghānstsós (ghānstsōs, ghādestsós), I remove a blanket.

shichá' naqoish'á (naqo'fá, naqoādesht'ál), I take my hat off.

qash'á (qā'á, qadesht'ál), I dig a stone out.

shawhó qash'á, I extract a tooth.

qashjá (qajá', qadeshti), I take or dig out grain.

qashkhá (qakhâ, qadeshtkhál), I draw water.

qashlós (qalōs, qadeshtlōs), I lead a horse from a field.

qash'ēsh (qā'ēzh, qadesht'īsh), I lead two horses.

qashnīl (qanīl, qadeshtnīl), I take several things out of.

qashjí (qaji, qadeshti), I take sugar from a bowl.

qashlé (qala, qadeshtlé), I take a saddle from a wagon.

qashtqí (qatqâ, qadeshtqī), I dig a post out.

qash'nīsh (qānīsh, qadesht'nīsh), I pluck weeds or feathers.

qashgyéd (qágyēd, qadeshgöl), I dig a ditch.

qastsós (qáłtsōs, qadestsös), I take a blanket out of a room.

qastśí (qáłtsí, qadestśí), I pull a hair out.

qashtqé (qáłtqî, qadeshtqél), I take a horse from a corral.

tqo qahashlé (tqo qahálö', tqo qahidëshlë), I draw or pump water.

lēsh qahashgyéd (qahágyēd, qáhideshgöl), I excavate, remove the dirt.

qahastsós (qaháłtsōs, qahidestsös), I take a blanket from a wagon.

qahashjól (qaháljöl, qahidëshjöl), I carry hay or wool from a house.

(Cf. also Redeeming from Pawn, under "Borrowing.")

INVERTING

nahidesh'á (nahidé'â, nahidïdesh'ál), I turn a coin over.

nahideshjá (nahidéjá', náhidïdeshjí), I turn grain over.

nahideshlé (nahidéla, nahidïdeshléł), I turn leather over.

nahideshníl (nahidéníl, nahidïdeshníl), I invert several objects.

nahideshtqí (nahidétqâ, nahidïdeshtqíl), I turn a shovel over.

nahideshtqé (nahidêłtqî, nahidïdeshtqél), I turn a horse or beef on its side.

nahideshqé (nahidéýî, nahidïdeshqél), I turn a large sack of wool over.

nahidesht'é' (nahidéłt'é', nahidïdesht'éł), I turn a mutton over.

nahidestsós (nahidéłtsōs, nahidïdestsös), I turn a blanket up.

SUSPENDING

dahidish'á (dahidí'â, dahidïdesh'ál), I hang up a saddle.

dahidishjá (dahidíjâ', dahidïdeshjí), I hang up some sugar.

dahidishlé (dahidíla, dahidïdeshléł), I hang up a rope.

dahidishtqí (dahidíftqâ, dahidïdeshtqíl), I hang up a gun.

dahidishqé (dahidíýî, dahidïdeshqél), I hang up a sack of hay.

dahidishníl (dahidífníl, dahidïdeshníl), I hang up several things.

dahidisht'é' (dahidílt'ě', dahidīdesht'éł), I hang up a mutton.
 dahidistsós (dahidíłtsōs, dahidīdestsōs), I hang up a blanket.
 dahidishtqé (dahidíłtqı̄, dahidīdeshtqéł), I hang up a beef.

LOSING

yōish'á (yō'fâ, yóădesh'ál), I lose a coin.
 yōislós (yō'flōs, yóădeslōs), I lose a horse.
 yōish'ésh (yō'fēzh, yóădesh'ish), I lose a pair of horses.
 yōishlé (yō'ila, yóădeshléł), I lose a rope.
 yōishjâ (yō'fjâ', yóădeshji), I lose some sugar.
 yōishtqı̄ (yō'ftqâ, yóădeshtqı̄ł), I lose a shovel or gun.
 yōishnıl (yō'fnıl, yóădeshnıl), I lose several things.
 yoishtqé (yo'ftqı̄, yoadeshtqéł), I lose a sheep.
 yōistsós (yō'łtsōs, yóădestsōs), I lose a blanket.
 yoishné' (yo'flné', yoadesh'nıl), I lose an article.
 yoishdél (yo'fldél, yóădeshdıl), I dropped and lost something.
 yōisht'é' (yo'flt'ě', yóădesht'éł), I lose or get rid of something.

CLIMBING, CRAWLING, CREEPING

yish'nâ (ı̄sh'nâ, desh'nâ), I crawl, creep.
 bâyish'nâ (bâı̄sh'nâ, bâdesh'nâ), I climb up.

Similarly other words are formed: tsé'nâ' yish'nâ, I climb or creep across something; bitsı̄gi yish'nâ, I crawl along the base of it; bitqâ'tâ' yish'nâ, I creep along a projecting shelf of a mountain or precipice; biyâgi, or bitlâ'gi yish'nâ, I crawl under it.

bâtqıs yish'né (yish'nâ, desh'nâ), I climb over.
 âdanash'né (adanâsh'nâ, adadésh'nâ), I climb down.
 (tsın) bânash'nâ (bansıs'nâ, bandesh'nâ), I climb a tree.

CLOSING

shı̄la ı̄shjöl (néhjöl, dı̄neshjöl), or shı̄la ı̄smâs (nélmâs, dı̄nesmâs), I close my hand or fist.

shı̄la alchı̄' ishłé (ı̄shla, adeshlı̄ł), I close my hand.

Similarly, nâłtsós alchı̄' ishłé, I close a book or letter.

nishchĭl (nishchĭl, dĭneshchĭl), or nĕshchĭl (nt'ĕ), I close my eyes, I squint.

dādĭsh'nōd (dādĭsh'nōd, dādĭdesh'nôl), I close my lips.

qādĭshbĭn (qadĕlbĭn, qādĭdeshbĭl), I close an opening, fill it.

dāndĭnshtĭn (dandĭnlĭn, dandĭdeshtĭl), I close a wall, dam an opening.

dāndĭnshjĕ (dandĭnljĕ, dāndĭdeshjă'), I close a corral (with logs).

dāndĭnshkhăl (dandĭnlkhăl, dāndĭdeshkhăl), I close a door, or dāndĭnsh'nĭl (dandĭnsh'nĭl, dāndĭdesh'nĭl), I close several.

ndĭzĭdgo (ndĕzĭd, ndĭdozĭl), at the close of the month.

altso năqăgo, at the close of the year, or yĭqă (yĭqai, doqă), it is the close of the year. (Cf. also close of ceremony.)

nishkôl (nĕshkôl, dĭneshkôl), I wink.

adĭsh'nĭ (nt'ĕ), I close my eyes.

LOCKING AND CO-RELATIVE WORDS

yĭnstăg (nt'ĕ), I cling or hold to it with my teeth.

sôtsăg (nt'ĕ), it (a dog, for instance,) clings to me with its teeth.

shidĭnitsă' (shidĭnestsă', shidĭnôtsă'), or shidĭnĭlaghăsh (shidĭneshghăsh, shidĭnolaghăsh), it clings with its teeth, sinks its teeth into my flesh.

shidĭnijĭ' (shidĭneshjĭ', shidĭnojĭ'), it sinks its claws into me.

de' aqĭdĭlĭd (nt'ĕ), they locked horns.

hashtĭsh hódĭljĕ (nt'ĕ), mud (rosin, glue, etc.) clings, or hash-tĭsh hódĭlĭd, it clings fast.

tsésô, glass, or akhăl bôtôd, leather clings (when moistened and held to stone or glass).

aqĭdĭljĕ, or bĭdĭljĕ, it holds fast, it is welded or glued together.

hódzĭznĭ', (squeeze), he clinched it.

yĭnstă' (nt'ĕ), or yĭstă' (sĕtsă', destă'), I cling to it, hold an object with my teeth.

dādĭsh'nōd (dadĭsh'nōd, dādĭdesh'nôl), or dādĭnsh'nōd (nt'ĕ), I hold it with my lips.

dădĭstă' (dadĕstă', dădĭdestă'), I clinch my teeth.

BREAKING AND CO-RELATIVE WORDS.

kĩnshtqĩ (kĩntqĩ, kĩdeshtqĩ), I break a stick or wagon.

altšánshtqĩ, I break it into.

dĩshqtá (dĩltqā', dĩdeshtqā), I break it up, break it to pieces, shatter it.

dĩtqá (dĩtqā', dĩdotqā), it is burst, broken.

ńtĩnĩ (ńtĩnĩ, ńtĩdonĩ), it is in fragments.

dĩshdó (dėldô, dĩdeshdól), I burst or explode it (for instance, a gun or bladder).

desdó, it is burst (it exploded).

yĩstšĩl (sėltšĩl, destšĩl), I break a pot or glass.

sĩtšĩl, it is broken (a plate, saucer, and the like).

qĩshťód (qėťöd, qĩdeshtťól), I break it off, such as a piece of dough, wet paper, and the like; dťódĩ, fragile, easily broken or torn, such as wet paper, chalk, etc.

do-ńtĩfĩzda, it is not hard, but soft and breakable.

aqĩnádās, it fell in, such as a house or wagon.

baghánĩdās, the ice broke through.

keėldô (geėldô, or keėltqô), kĩdoldôl, it is broken, it will break.

yĩshdó' (sėldô', deshđó'), I burst a bottle; yĩldó' (yĩsdó', doldó'), it is burst.

nádĩltšĩd (nádĩltšĩd, nádĩdoltsĩl), the mud breaks off, or nádĩltqāl (nádĩltqāl, nádĩdoltsĩl), the (dried) mud falls from the wheels.

nádĩghá' (nadĩyá, nádĩdogál), a horse or dog breaks away.

kĩ yĩshó (yĩzhöd, deshól), I break or tame a horse.

SPILLING.

yanákhād, it is spilt.

yandokhál, it will be spilt (from a small vessel).

yánĩldzĩd (yándoltsĩl), it is spilt (from a jar).

wó'áldās, it is spilt; wóádoldās, it will spill (by shaking).

ya'ishkhá (ya'fkhá, yaideshkhál), I spill it, I empty a vessel.

yash'á (yá'â, yeidesh'ál), I pour off.

yaszfđ (yeizĩd, yeidesĩl), I pour out.

STRIKING

nanshqāl (nānēlqāl, ndīneshqāl), I strike him with a club.

nanshnē' (nanēlnē' ndīneshnīl), I strike him with a stone.

nanūshqāl, I strike you with a club.

nanūshnē', I strike you with a stone.

nanstsqīs (nanēltsqās, ndīnestsqīs), I whip him.

nanūstsqīs, I whip you.

nandīshqāl (nandīlqāl, nāndīdeshqāl), I club you.

nandishnē' (nandīlnē', nandīdeshnīl), I stone you, or strike you with a stone.

nandīstšīn (nandīltsīn, nandīdestšīl), I strike you with my fist.

nandīstsqās (nandīltsqās, nāndīdestsqīs), I give you a whipping.

nikhindishtē' (nikhindēltē', nikhīndīdeshstēl), I floor you.

niłdsidīstšīn (niłdsidēltšīn, niłdsidīdestšīl), I punch you.

nikhīdishgō (nikhīdēgō', nikhīdīdeshgō'), I strike the ground in falling.

lējishnē' (lēdsīlnē', lēshdeshnīl), I strike the ground with a hard object.

naābidsīstšīn (naābidsīltsīn, naābīzdestšīl), I prostrate him with my fist.

naābijīshqāl (naābidsīlqāl, naābīzhdeshqāl), I prostrate him with a club.

nnāgha ajīshkhād (adsīkhād, azhdeshkhāl), I strike you once across the back, or when done with frequency, nnāgha ājīshkhād (adsiyēkhād, azhdiyēshkhāl), I strike you several times across the back. Similarly, the following are formed: ntsīya ajīshkhād, I strike the back of your head; njā ťa'ājīshkhād, I box your ears for you.

ajishgyé (adsīgō', āzhdeshgō'), I ram with my head, butt another with my head.

adistsél (adétsél, ādīdestél), I strike (the moccasin).

yinstsél (yinfstsél, yidestsél), I strike it.

yisō (séžō, desō), I strike a match.

tlél yishkhał (sēkhāl, deshkhāl), I strike a flint or match.

yishtqāl (sétqāl, deshtqāl), I kick it; adishtqāl (adsiyétqāl, āzhdiyeshtqāl), I give it a kick; ājishtqāl (adsítqāl; āzhdeshtqāl), I give it several kicks; nīshhtqāl (nsétqāl, ndeshhtqāl), I kick you; nanshtqāl (nanétqāl, ndīneshtqāl), I kick it again; nannshhtqāl, I kick you again.

sīsqé (sēlqī, diyesqél), I kill it.

TEARING, DESTROYING, ETC.

iszós (fzōz, adēsóz), I tear.

yiszós (ízōz, deszós), I tear it; ba yiszós, I husk corn.

yishchó (yflchó, deshchól), I destroy or spoil it, or hashchó (hólchó, hodeshchól), I destroy it.

nehesóz (nehézōz, nihideszóz), I tear a cord.

nehesqás (nehéghāz, nīhidesqās), I crumble it with my hands.

kīnīshnīsh (kīnīnīzh, kīdeshnīsh), I tear a rope.

do-naha'náda, it is immovable, you can not budge it.

īslād, it is riven; baghāndlād, rent into, torn; kīndlād, a cord is torn; nehest'ód, it is in shreds (for instance, a coat).

tqāōsh'nīl (tqaisēnīl, tqaidesh'nīl), I tear it down, destroy it.

tqānāōsh'nīl (tqaneisēs'nīl, tqaneidesh'nīl), I tear it down again.

SICKNESS AND DISEASE

Sickness, disease and corporal injuries are treated in the light of chastisement by the offended divinities. The source of sickness is therefor to be found not so much in any physical cause as in some magic influence, which must be removed by the power of a specific chant by making a propitiatory sacrifice to the offended holy person, or by employing the greater power of a higher divinity in removing the witchery and malevolent influence of an inferior one. Should the sickness continue after a given ceremony, such a fact can not be attributed to the impotence of that ceremony, but clearly shows that the offense has not been properly traced and must be sought elsewhere. In consequence there is often no end of singing in one form or

other until death ensues or relief is obtained, as the method of dispatching a chronic patient by means of poisonous herbs or drugs is now practiced with ever decreasing frequency. Death is, of course, beyond human calculation, yet should ordinarily not interfere with an effort to obtain a prolongation of the period of life by invoking the aid of some chant. When the approach of death is certain, however, every ceremony subsides, and the officiating singer withdraws before the inevitable issue.

Withal, the singer is the man of medicine, as Navaho therapeutics are effectively applied in the course of the rites only. Intellectually, too, the knowledge and specialty of the singer is gauged, not so much by his familiarity with the sanative qualities of herbs, as by his greater or lesser knowledge and dexterity in performing a given rite. In fact, when it is known that his medicine pouch is possessed of paraphernalia of some antiquity and difficult to acquire at present, or when others have been cured of a similar disease through his services, the demand for a given rite and singer becomes greater regardless of the disease. That the suffering of some patients, especially when rich in wealth, is unduly prolonged through the chicanery and greed of a clique of singers bent on their exploitation, is unhappily true, but scarcely avoidable in the face of an equally general credulity. And though the uninterrupted continuation of singing is usually productive of physical exhaustion and high fever, this fact can little be considered when the chant is all-important. Moreover, a glance at the list of harmless herbs and the manner of applying them in most ceremonies lends color to the opinion that medicines are of very minor and secondary importance throughout. In addition, too, medicines obtained from American physicians do not deprive the ceremony of its primary importance and inherent power, and are often taken while a ceremony is in progress, or subsequently to it, without apparent detriment to its success.

Obviously, then, the subject of disease is intimately connected

with that of religion and the chants through which a remedy is sought. The present chapter, however, is devoted to diseases and afflictions regardless of their religious character. A list of popular remedies frequently applied independently of a ceremony is also added, though many of these are no longer in vogue. Regarding the native recipes for poisonous snake bites, hydrophobia, or similar cases, nothing of value could be obtained, as such information is the property of a chosen few who scrupulously safeguard it even from their own tribesmen, and would divulge it with extreme reluctance.

The contagiousness of some diseases is well known. Thus smallpox is much dreaded, the patient being hastily deserted in the hogan and locality infected with the disease. In recent years few cases of it have occurred. Diphtheria, too, was checked by close quarantine no other remedy being known. Modern diseases, such as pulmonary and tubercular troubles, though formerly unknown, are now very prevalent, and words have been coined to describe them.

While surgery is not practiced the Navaho readily submits to the surgeon's knife when the necessity for it is explained.

The singer as a rule does not act as accoucheur, but assists sometimes in supporting the laboring woman. Immediate assistance is offered by neighboring female friends of a woman in confinement, and obstetrics as a specialty is unknown.

daātsá, he is sick, or bedridden.

nální, a disease, or germ of disease.

náldsíd, or náldsíd nasdlí, decay has set in, it is incurable.

tsítqábă, dandruff.

sitsítsín diní, my head aches, headache.

biná diní, sore eyes; diní or hodíní and nesgaí are often used to express local afflictions, thus, hachí' diní, a sore nose; jēyí' (shijáyí') hodíní, earache; habíd diní, pain of the stomach, etc.

biná ádini, a blind man; bijékhaí, deafness.

aná ilchōsh, a sty, or pimple on the eye.

chīsh is sometimes used for catarrh; *nǎdīl*, nose bleeding, or *shinǎēdīl*, my nose bleeds.

shijé iqés, my ear is scabby, pus is settled on my ear; *shijéyī' hǎqés*, I have a running ear.

whō dīnf, toothache. Similarly, *adáyī' hodīnf*, a sore throat; *sizēnaghá*, or *sokhós dīnf*, my neck pains me; *sitsó*, (my tongue and throat); *shinītsī'*, (my cheek); *shinīshjá*, (my cheekbone); *shiyátsīn dīnf*, my jaw aches; *showhótsī dīnf*, or *hodīnf*, my gums ache.

diskhós (nt'é), I cough, have a cold, but more frequently, *dokhós shidīlné (shidolná, shídídólnǎ)*, I catch a cold.

bizábâ, or *shidá' nasdlád*, my lips are (torn) chapped, or *shidá' aqidóltqál*, my lip is burst on the whole surface, or *shidá' istqál* when burst in center only. Similar expressions are used for chapped skin on the hands; *shlá' nasdlád* and *shlá' aqidóltqál*, chapped hands.

binádīgīs, cross-eyed; *binǎlchī*, his eyes are bloodshot, though this idea is usually paraphrased.

SPECIAL DISEASES

ayádinī, diphtheria; *ayayá dahazlī*, goitre, which occurs rarely. *yānaháskhād*, the planting of lice, the ringworm.

khādagūni, the smallpox, for which *lōdtso*, big sores, is also used.

lōd donádsīhi, an incurable sore, the cancer; *lōd*, or *bilōd*, a sore, an inflammation.

cháchōsh, syphilis, shanker.

bilfzh bō'nī', stricture.

lichigoqá' hadajéigi, red spots appearing, the chickenpox and measles.

ishchīfd, or *qūishchīfd*, the itch (a prostitutional disease).

hatqáhodigyēs, the body is curved, apoplexy, paralysis.

nānchād, swelling, dropsy (?).

jei ádin, no lungs, is used by some for pneumonia or pulmonary troubles.

dǎdeshchī, or dǎdeshchī, blood poisoning.

agǐsi, the gout, rheumatism. This is also expressed by chōyǐn (chōyǐni), menstruation, as the touch of a menstuous woman is said to cause stiffness and the hunchback. Hence, the three words are identical, chōyǐn, menstruation; chōyǐni, a hunchback; chōyǐni, rheumatism, a stiff back.

GENERAL INDISPOSITION

ntqǎsh dohatsǐda? does your body ache? what ails you?

shitqǎ do-hatsǐda, I feel bad, I am slightly indisposed, or shitqǎ dooqǎlyǎda, I have no feeling in my body, I am not sick, yet not well.

tqǎhunǐgai, or shitqǎhonesgai, I have a fever; akǐneshtǎ (ntǎe), I am indisposed; akǐnetǎ, he is feeling bad.

nǎsdō', I am stiff (from work); nsǐsdō', I am sore, my muscles ache; tsǐnǐdō', he is very sick. Usually reference is made to incurable diseases, as lichǐ tsǐnǐdō', sick with smallpox; hayayǎ dǐnǐgo, diphtheria; but occasionally, also, dokhōs tsǐnǐdō', a severe cold; hatqǎhonǐga, a raging fever, etc.; tsǐnǐdō' shǐ bisqǐ, he probably died of fever. Hence, the expression, do-dsōsbǎ'da, death is inevitable, is applicable to all of the diseases just mentioned, with the exception of tqǎhonǐgǎ, fever.

saghǎs naha'nǎ', my esophagus palpitates.

jaǐ dǐtsa', palpitation of the heart; jaǐ dǐnǐ, heartburn.

ilkhō', vomiting; nǎshkhǐi (nsǎkhǐi, nǎdeshkho'), I vomit.

jǐdini, he is hurt (lying).

shiǐnǎhodaghǎ (shiǐnǎhodeyǎ), I am giddy, dizzy.

dǐsǎ (dezǎ, dǐdesǎ), I belch, gastritis.

shǐdǐlcǎe', food is repulsive to me, nausea.

shichǎ shǎe'ǎnǐ', I am constipated.

sitsǎnǎlyōl, or nǎnsōl, I am flatulent; chǎe'ishtǐd, the colic; chǎdǐl, I pass blood, or sitsǎnalchǐi, I have painful diarrhoea, or shichǎ shaghǎnlǐ, I pass water. Hence, shizhǐ' dǐnl, my whole body pains, and shibǐd, my stomach; shichǐ, my bowels; shǐlǐzh dǐnl, my urine aches, diuretic trouble.

do-ishqázhda, I can not sleep, insomnia.

díl síté', boiling blood, blood spitting, or litsói, yellow, from the color of the phlegm.

ayí' dédíł, a hemorrhage; díł sháhálí (nt'é), I am bleeding; díł téyá, he is covered with blood; díł qúisqí, he bled to death.

hatsá tqídíl'í, a pain in the abdomen.

tqídajíná', impaired vitality, indisposition, which may be caused by a fall from a horse, wounds, bruises, weariness, soreness, etc.

bádaqo'a', an accident; hī nashílgö', the horse threw me; hī sístqál, the horse kicked me.

níłkí (neskí, dínołkí), a clot of blood.

síd, a scar; sêes, a mole; náetsa, a pimple; náachī, small pimples covering the entire arm or body.

chözh, or ilchözh, a boil; tqúdisöl, a blister; tqóiltqâ, a tumor or blood blister; ishtlísh, an abscess; íqés, itching.

ditsqíz, a shiver, trembling.

danátsa, or danátsáhi, fits or spasms; ná'icháhi is also used for this, but particularly expresses insanity or mental derangement due to intermarriage of close relatives. It is said to be characterized by attempts to plunge into the fire after the manner of a moth (icháhi), from which the term is borrowed.

qís, the pus; qís istqál, an open sore; qís qálí, an open leg.

nánshquđ, I limp; aneshquł, I limp slightly.

káyí'Y' hokáni, bowlegged; jād hókhalí, knockkneed.

shlá' tsfhíldās (tsfhíldās, tsfdoldās), my hand is bruised.

Similar expressions are: shlá' tsfhít'öd (tsfhít'öd, tsfdot'öl), the skin is peeled, or tsfhishchífd (tsfhíchífd, tsfdeshchíł), I scratched my hand, or shlá' tsfhishkí (tsfhíkí, tsfdeshkíł), for a long bruise, or shlá' tsfhisqās (tsfhíghās, tsfdesqās), the skin is rasped (as from a bite). Cf. also hashlíkid, I was scratched; naséldās, I am bruised or skinned; tsísághās, I rasped or bruised the flesh.

nsédlād, I am bruised (from riding); shitlá yisí, I lost my buttocks, is figurative for the same idea.

aqánishiná'á, a cramp; shílá', or shikhé digyēs, a cramp in the hand or foot; áqishkásh, I sprain my ankle.

haké ilchí', he has nightmare; hatsá yajiltqi, he speaks in his sleep.

adískhes (adeskhæs, áðideskhös), I choke; adōlkhæs, it will choke me.

ndídsi, I gasp, breathe; hání ásdíd, he is unconscious.

adsísdín, he is breathless, ausgespielt.

yisdá' yínldsíl (nt'é), his lungs are good, long-winded; yisdá' nsín (nt'é), out of breath, or yisdá' nanógō', his breath failed him.

yisdá' nanshgō' (nanēgō', ndíreshgō'), my breath fails me.

yisdá' nisí (nizí, dinésíl), or qāhidishqí (nt'é), gaping, breath fails me; yisdá' qóyē (nt'é), it is very close (in a room), or sultry.

tsistqín (nt'é), unsound, broken-winded; also used of a horse.

yíní bilqé (bisqí, bídiyolqél), he died broken-hearted.

dechōhojída, he is nearing his end.

hakháji hazlí, he had a close call (from sickness or accident).

shikháji hazlí, I had a close call.

násdsi (nasdsí, ádesdsi), I am recovering (my wound is recovering).

bí' quneshígo, startled as a deer, nervous and alarmed person.

atsá qá'él, premature birth; atsástqín, an abortive.

esdzán ajilchígo, a woman in confinement.

khéwhös, a bunion; khébâ ntíígo dá'nazníligi, corns.

shikhé shilchí', my feet smart; shikhé ní'él, my feet perspire.

hadātés, inflammation between the toes, or below the arms.

shikhé hādāst'é', my feet are mushy and soft, or khé díkôsh, sour feet, malodorous, or khélchün, bad smelling feet.

shijád nesgái, or shijád diní, my legs are sore; dodinshjáda, I am not a good pedestrian, am weak in the legs.

kōzh, saline (from dokōzh, alkaline), excessive perspiration below the arm leaving its mark on the shirt.

APPLIED TO SURGERY

alkíhonishgësh, I dissect, cut open.

hatqágojishgësh, amputated limbs; hagán, (arm); hálá', (the hand); hajád kishnígízh, the leg, etc., was amputated.

hatqágo hadsístód, all his limbs were pulled out, or hagán dsísqāl, the arm is clubbed off; hagán dsístqf, the arm is struck off; hagán jishné', the arm is cut off (with a knife).

do-qǔэхозındá, or do-qǔэхосíзд it'áda, or do-qǔэходsosíd jít'áda, he is mutilated beyond recognition.

REMEDIES

baǎqashyǎ (baǎqashyǎnt'æ), I take (or took) care of a sick.

bíseldá' yisdá, I remain with a sick person.

Dandruff (tsítqába) is said to be removed by the application of red juniper (gǎd ní'éli) and a grass called tǒlé', which are rubbed well in after bathing the hand. It will be remembered that the hairbrush (beézhǒ) is provided with a branchlet of the juniper (gǎd ní'éli), presumably as protection from evil influence.

Snuff (ní'ínf) was largely used for headache and nose trouble (chǐsh azé, catarrh medicine, and hachf dínfji azé, sore nose medicine). Some plant names indicate this purpose.

For headache a snuff prepared from a Gentian (ínzíd chǐl) was said to afford some relief. For nose troubles dried and pulverized herbs were used, such as blue eye grass (aze tǒ'hi), the Zinnia (ní'ínf ntsǎgi), and another called ní'ínf tso, tall snuff, or the aster, and the silkweed (tǐsh ildéi tsós), and Apoplappus (tǐsh ilawhói), and the Solanum (náłtsúi), which latter was also a remedy for sore eyes (ná dínfgo azé).

Earache medicine (jéyǐ hodínf azé) was prepared from the pulp of a tree (tsísdísi) found in the San Francisco Mountains, which was pulverized and mixed with water (tqahikhágo, powder in water) and small quantities dripped into the ear.

Deafness was said to be partially relieved by burning balls of tree rosin (jēsā) on hot embers, allowing the fumes to pass into the ear. A kind of stone rosin (tsé' bijékhał) was applied in the same manner.

Toothache medicine (whó azē) consisted of a mush prepared from crushed leaves of alum root (whotsíni azē) and hastšél-tsī (?) and Apoplappus (tlīsh ilawhóí) mixed with water. The mush was held to the aching tooth with a heated stone (awhó' bídíníldö', the tooth is heated). As alum root was also chewed to relieve the sore gums it was called whotsíni azē, tooth-gum medicine.

No remedy was known for the measles, smallpox or diphtheria.

Blood poisoning is cured with a poultice prepared from a plant known as ndochí (?) and placed on the swelling (dīdeshchí azē, blood poisoning medicine).

Medicine for the itch (dishclíid azē) is made of gágě baká', crows' fat, with which the skin is well rubbed.

Pimples (náětsă) were removed by rubbing them with the leaves of a plant called náetsă azē, pimple medicine.

A liniment made of the leaves and branchlets of the cancer root (lédöl'ězí) was employed for sores in general (lödgi azē, sore or boil cure).

Diuretic troubles (halízh dinígi azē) were removed by a beverage prepared from such plants as Whitlow grass (alízh beidzól), or the hummingbird food (dahitqfhidă tsös), or the "weed which kills (chíl agháni)."

Swellings (nánchād) were removed by applying the plant of this name, *Thellipodium Wrightii* (nánchād aze).

Syphilis was supposedly removed by a beverage (yidlá) of syphilis medicine, *Cordylanthus ramosus* (cháchlösh azē) and the buttercup (létso iljá'ě), which were powdered and taken in water every morning.

The gout tonic (agísi azē) was a beverage made from the crushed leaves and branchlets of the *Gaillardia pinnatifolia* (tsis'ná'dă), added to lukewarm water, and applied internally and externally.

Rheumatic stiffness was cured by a tonic (choyíni azé) boiled from the leaves and branchlets of the barberry (tsiyă chéchil), or *Corydalis aurea* (hasbídidā).

Medicine for bronchial and troubles of the esophagus (aghás azé) was found in a tea made of the crushed and boiled leaves of *Oxytropis* (debé haichídi ntsáigi).

Blood spitting (díl sít'é' or litsói azé), was relieved with the leaves of white sage (gă'tsodá), which were slightly boiled, adding a pinch of salt to the concoction.

Mormon tea (tlö' azé) was used for stomach troubles in general (habíd diníji azé). Other herbs used as a remedy in similar cases were: ndīyíli nłchíni (*Verbesina enceloides*), dahitqfhidā (*Gilia attenuata*), dahitqfhidātso and dahitqfhidā labá'igi (painted cup), chíil abé' (milkweed), and nī'íníł tsös (*Townsendia strigosa*). The usual method was to crush the dried leaves between the fingers and stir them in a bowl of water.

Pain in the abdomen caused by colds, loose bowels, or lifting a heavy weight, was removed by a special preparation (hatsá tqídílłgo azé, medicine for pains in the abdomen) made from unidentified herbs, ní'tsösi, ní'tsösitso and aya'al.

A universal tonic or remedy is designated as "life medicine," and is still largely applied in cases of indisposition or "impaired vitality" (tqídajīnă). A provision of this life medicine (qină aze, or inăji azé) is usually kept in stock, and carried on journeys for eventual use. The stem and leaves of various herbs are gathered in their season and dried, in which condition the medicine is called azé tsīn, medicine twigs.

In the event of their use a small handful is crushed with the fingers, mixed in water, and applied internally and externally (tqahitsédgo yidlă, crushed and taken with water). The life medicine is usually taken independently of (and previously to applying for) the chant. Foreign drugs are treated much in the same manner and are often designated as such. Some of the herbs designated as life medicine are herewith subjoined.

The milk vetch (azē dilqīl), sensitive brier (azētsōs ntsāigi and labā'igi), also azē lakhān, and azē hāldzīd (of the Compositæ), and milfoil (azē īltsaf), and plumed thistle (azē hokhānitso), and the sow thistle (azē hokhāni labā'igi), and a kind of sagebrush (azē ndōgaf), and the cudweed (azē disōs), and the rayless golden rod (azēwhō'), and a crucifer (azē qāgai), and the false wallflower (azētso), and the bladderpod (azētsōs), and the pennycress (azētsōs altsāisigi), and the rockcress (azē labā'igi), and the cress or Gentic (azē dotfīsh), and false mallow (azē ntlīni), and goosegrass (azē ntlīnitso), and the Eriogonum (azē nī'baghāntī'), and Eriogonum alatum (lē azē), and white medicine (azē lagai), and red medicine (azē lichf), and thick medicine (azē dīfī'), and ayā'ai (?), and azē bijfchihīgi, which is also used at childbirth, and the evening primrose (azē sēs'), and another primrose (azē litsó), and *Gaura parviflora* (azē sākáz), and a geranium (azē qinā), and the willow herb (chīl lātqā ātsōs), and evening primrose (tīeyīgái labā'igi), and the stoneseed gromwell (azē nānesdizitsōs), and meadow rue (tqázhi nlchfn), and the *Mentzelias* (īltfīni and īltfīnitsōs), and yarrow (hazaīltsēi), and the aster (chīl nīlqfnigi), and *Frasera* (chīl behētīl litsóigi, and chīl behētīl nnāezigi), and *Asclepiodora decumbens* (jādīldēi), and cattail flag (tqēl), and flag (tqēl bitā lānigi), and sagebrush (tseēzhī'), and others.

Spurge is chewed and used as a liniment for pimples, hence its name, naāchf azē, pimple medicine.

Similarly, for boils (chōzh azē), a remedy is found in the shape of a liniment (betlō) made of such plants as the *Euphorbia* (khétsī halchī) and azē behétsī halchf.

A remedy for vomiting (īlkhōgi azē) is found in the rubber plant (nāēshjā īlkhēi) and the broad-leaved medicine (azē ntqéli), the leaves of which were pulverized and added to water (itsédgo tqasākhāgo jīdlā). The lather (tqálawhūsh) of the broad leaf just mentioned is said to relieve heartburn (jai dīnfgo azē).

Medicines for confinement (esdzān alchfihigi azē) consist of bev-

erages prepared from plants called awé biyaláí yilbézh (which boils the placenta), or ayán bilízh hálchín, and slender milkweed (chíl abé' altsósigi), for purging. Birth medicines (ajílchí' azē), of which there are several: watercress (tqalkhá dahikhál) is used as a tonic after deliverance; silkweed (dō-bichījilchí', preventing birth) is used for that purpose; greasewoods or sagebrush (tsä' and tsétqätsä') aid deliverance; Townsendia (azē náoltqädi, of which there are several kinds) accelerate deliverance.

A remedy for alarm and nervousness (bî'quneshíłgo bichí' azē, also called nīdzji, corral medicine) is made of New Jersey tea (bî'dá, or diné'ě' chíł), and of Colombo (bíhíłjáí), which are applied both internally and externally.

Corns are ordinarily removed with a knife. A liniment made of wormwood sagebrush (tquíkhál) is sometimes spread over the wound.

A foot ease was prepared from a plant known as azé dishóigi, which was applied to the foot in the shape of a liniment and placed in the moccasin to remove the bad odor. In recent years some seek a remedy for bad-smelling feet in the warm sheep manure. Immediately after removing the paunch from the slaughtered sheep the feet are placed into the manure until it has cooled off. This, if repeated two or three times, is said to effectively remove all sweating and bad odor from the feet. A liniment made of cocklebur (altqánatséhi) was held in the armpit to remove excessive perspiration (kōzh azē áďă'āshné, I hold the medicine in the armpit).

To remove the effects from the bite of a spider a tea was prepared from the bladderpod (nashjéidā labá'igi). The effects from swallowing a spider were removed by the spider medicine (nashjéi azé), which was prepared with *Ambrosia fragrans* (kínædlíshidá). When ants were swallowed a medicine (wolächí bichí' azé) was prepared from the inner bark (bitqát'āhi) of *Findlera rupicola* (tsítłíz), which was pounded to a pulp, mixed with water, and

taken internally. The sting of ants (wolächf ishíshgo azē) was treated by chewing dodgeweed (tsildilyísi), or greasewood (duwūzhilbaí), and placing the pulp on the swelling caused by the sting of an ant, bee or wasp. Wolachī begá, antidote for ants, was used to a similar advantage. The plants called ī'nelnéji chīl and ī'ní'gi chīl are applied internally and externally in cases of a stroke by lightning, or the bite of a snake.

Some Words Referring to the Preparation of Medicine

azē hanshtqá, I am looking for a medicine; chāehanshtqá, I did not find it; azē ishlé, I am preparing a medicine; azē áda-āshlé, I mix a preparation.

azē átlō, a liniment; azē iká (ikán), a powder.

azē istsíd (yítsēd), I pound or crush medicine; azē ishká', I grind, pulverize it; azē dínishqísh, I crush it between my fingers; or, bitá, or bilátqá'í dínishqísh, I crush the leaves and flower of an herb; azē tqáishkhā, I put it in water. Grinding and stirring in water is ordinarily expressed by one word, as tqahitsédgo, pounded on a stone and added to water, or tqahikhāgo, the meal or powder added to water (tqasākhāgo, after the powder has been added).

azē ádá'āshné, I prepare medicine for my personal use.

azē adishné, I prepare it for myself and others.

azē ishdlá, I drink the medicine, take it internally.

azē adéshtlō, I apply it externally; íshtlá', I anoint or rub.

binábín, an antidote; azē ídínildō', a poultice.

azē shinf' ē'ēshnfl, I snuff a medicine.

Words Referring to Persons, Places, Animals and Plants

NAMES OF PERSONS

Persons are designated as follows:

awé', a baby, infant; shi awé', my child.

ashkhí, a boy; (pl. shikhé, or ashikhé, boys).

át'éd, a girl; (pl. át'édkhe or át'ékhe, girls).

alchfni, children; sha'alchfni, my children; ba'alchfni, his children.

tsilkhé, or dzilkhé (plural probably tsilkhé), a youth, young man; diné, a young man.

jikhé (pl. jikhé), a maiden.

diné', a person, a man.

hastqfn, a man, a husband; bahastqfn, her husband.

asdzáni, or esdzán, a woman, wife; beësdzā, his wife; ba'ád, his wife, is less frequently used, though it occurs in composite words, such as ba'ákhe láni, polygamous.

hastqúi, the old folk, old men; shāhastqúi, my ancestors or tutors, the old men of my lineage, those with whom I take counsel.

sāni, the old women.

khā ádīni, a virgin, an unmarried girl. This expression is also used in designating a widow, just as ba'ád ádīni designates a widower. A better expression is bizhá naghá, one who is alone, hence, a widow and a widower. Professed bachelors are unknown to the Navaho.

ákís, a friend; sikís, my friend; sikísó! my friends!

PRONOUNS.

shǐ, I; nǐ, thou; bi, he and him; niqí, we and you (two); daniqí, we and you (more than two); bi, they (two); dabí, they (more than two).

PERSONAL NAMES.

In some families the uncle of a boy is invited to give his nephew a name, which is usually suggestive of war. Still a goodly number are indifferent to this custom, the parents naming the child as they would, and while warlike names for children are not infrequent, especially for girls, we now meet with such epithets as the fat or fine boy, the red or nice girl, etc. No special festivity, however, accompanies the naming of a child, which is a purely private affair.

Some maintain that the war name is in reality a secret name known only to closer relatives and never divulged to outsiders. An occasion for its use is had at the blackening during the war dance, at which the name of the patient is proclaimed and inserted into the songs celebrating his victory. It is learnt previously from the relatives of the patient, and changed only in the event of an identity of names of patient and herald. Others attach no importance whatever to this name, which is given by the family in distinction from the better known name given by acquaintances and friends at first opportunity. At any rate the name of early childhood is usually superseded by some sobriquet invented to suit the habits or physical peculiarities of the individual.

Patronymics, or family appellations, are not in use, the nearest approach being names of children retaining the parent's name owing to some distinction of the latter. It is not uncommon, however, to refer to a person as the son of so and so, or the daughter of the late so and so, in addition to some other name which, perchance, is not equally well known. This is especially true of women whose name, being property of the family circle, is not readily and properly exposed to outsiders, and who are,

therefor, as a matter of decorum, ordinarily referred to as the daughter of Mr N. N., or after marriage, as the wife of this or that man.

Navaho decorum does not permit of addressing a person by his name, or of disclosing it upon direct inquiry. The address is made in terms of familiarity, such as my friend, my brother, grandfather, my daughter, and the like, while the name of a person is learnt from others. Custom varies with regard to disclosing another's name in his presence, some being averse to information of this kind given within hearing of the party concerned.

The following presents a partial list of the personal names of children, of men, and of women, to which, as a matter of record, the names of early distinguished chiefs have been added. This is followed by a list of names given to Mexicans, Pueblos and American residents.

NAMES OF BOYS

Boys are given names suggestive of war, such as the chief, the speaker, the warrior.

naʔái yił yigál (naʔáilyigál), the chief or speaker who walks in addressing them.

naʔá yilyáłtqi, the speaker addressing them.

hashkél nadál, he returns with the warrior.

hashkhél yigál, the warrior walks while addressing others.

ba yił chiniyá, he is bent on war.

ba yił naiyá, he went out to war (again).

Frequently other descriptive adjectives are added, as hashkhé yázhe, the little warrior; naʔá tsósi, the slender speaker; naʔá tso, the large speaker; naʔá næs, the tall speaker; naʔáłchī, the red speaker, etc. ashkhi hozhóni, the beautiful boy; ashkhi neskā, the fat boy; ashkhí dijól, the round boy; ashkhiłchī, the red boy; ashkhi biná dotłizhi, blue-eyed boy; tsósi, the slender one; tsilbáhi, roan hair, or some similar sobriquet.

NAMES OF GIRLS

Names of girls are, with few exceptions, commemorative of war. Even now, in peaceful times, the custom of indicating some feature of war by the name given to girls is generally followed.

bāzhnábāi, she came to him in war.

alkínábāi, she met war (born on the battlefield).

yiné' násbā, she surrounded the country with war.

yitqānábā, she mixed in war.

yīlnábā, she arrived with a war.

nānábā, returns with war, or war returned with her.

dezbā, going to war.

dóbā, there was no war.

kēl nábā, a mild war.

yildézbā, they went to war with her.

yanábā, she meets the enemy.

ałnábā, wars passed each other (war raged in two places and opposite directions).

nadlf nábā, the chieftainess of war.

nadlf seems to be an equivalent for queen or chieftainess, hence, nadlf tsósi, the slender queen; nadlf yázhe, small queen; nadlf ba, the girl queen; nadlf'łchī, the red chieftainess; nadlf łabá', the gray queen; or nadlf is also used with the above names: nadlf yildezbā, the queen with whom they went to war; nadlf nanábā, the chieftainess with whom war returned; nadlf nāzbā, who was surrounded with war, etc.

It is not unusual to find two names for one person. Thus, in addition to the above, esdzan tso, the large woman; esdzān næz, the tall woman, or atéd yázhe, the small girl, etc.

NAMES OF MEN

Names for men are suggested by some physical distinction or defect. The word hastqfn which is often prefixed corresponds to our "Mister."

hastqín yázhe, Mr Small, or the small man; hastqín tso, Mr Large, or the large man; hastqín nēs, or snēs, Mr Long, or the tall man; hastqín altsósi, Mr Slender; hastqín altsísi, or altsíhi, Mr Little; hastqín dil, Mr Heavy or Fat, the heavy-set man; hastqín zhīn, Mr Black; hastqín sgáhi, Mr Dried; hastqín ltsoi, Mr Yellow; hastqín ltsoi tsósi, Mr Yellow Slender (Mariano).

diné' yázhe, the small man; diné' lizhíni, the black man; diné' altsísin, the late little man; diné' chīli, the chunky or dwarfy man; diné' tsósi, the slender man; diné' łagaini bitsósi, the late white Navaho's nephew; diné' ayúí, the nice man.

jani, John; cháia tso, Big Charley.

tsiishchíli, Curly Hair; tsiishchíli tso, Big Curly; tsiishchíli tsósi, Slim Curly; tsiishbízihi, Plaited Hair; bitsí lichí, Red Hair; bitsílgai, or bitsíghałagai, White Hair; tsí litsoi, Yellow Hair; tsí tsósi, Slender, Sparse Hair; tsíchóshi (chíchóshi), Stubby Hair; tqági litsoi, yellow hair hanging over forehead; tqági litsoini biyé', the son of the late yellow hair on forehead; bitsiyáel ntsái, he with the large queue.

binā ádini, the blind one; binákís, the one-eyed one.

biní ádini, he with little or no sense.

dághanāz, the long mustache; dághałbai, the gray mustache; dágha lání, or bidágha lánigi, he with the full or heavy mustache; dágha yázhe, the small or thin mustache; dághadasakhád, whose mustache stands in clusters; bidágha ndæsqéligi, who has a dark mustache.

tła, the left-handed one; tłá yázhe, the little lefty; tła tso, the big lefty.

nánłqúdi, he who limps.

khě yistqíni, he with the frozen feet.

khéshgúli, clubfooted; khe gúdi, short-footed.

hastqín bogúdi, Mr Kneecap (he with the defective knee).

gāāgúdi, he with the short arm (having lost the forearm).

bíłā āgúdi, the fingerless one; chőyíni, the hunchback; doyál-tqí'í, the dumb one; bijékháł, or hastqín bijékháł, the deaf one;

bowhógīzhi, he who lost a tooth; whósin, the late "shoulder" (Lomo); chōzh ádini, he without the calf (of the leg); jād sházhi, knotty legs; gíshi, or hastqín gíshi, the man using a cane; gíshīnbiyé', son of the late gíshi; gish neitqíni, he who carries the cane; ashkhīstfīni (yistfīni), the freckled boy; tqóli (nltqóli), clear or crystal color (of the eyes).

Occupation and trade are additional sources of names.

adakhái, the gambler; yóadakhái, the gambler with beads.

adildfī, the gambler at the stick game; adildóni, the shooter or marksman, or naaktóli, the arrow shooter.

adilgáshi yázhe, the little witch, or bean shooter; hatqān yázhe, the little singer; hatqáilgai, the white singer; hatqáli tso, the large singer; hatqáli nádloi, the laughing singer; hatqáli næs, the long or tall singer; hatqálinæs bináli, the uncle of the tall singer; hastqín chúi, Mr Ugly (probably meaning chanter for witchcraft).

nātāni, the chief; nātāni tsósi, the slender chief; díchāli, he who speaks often.

béshlagai, or béshlagai il'fīni, the silversmith; béshlagai il'fīni altsósigi, the slender silversmith.

atsidi sáni, the old blacksmith, who was also named besh il'fīni, the man working in iron. He is reputed to be the first blacksmith of the tribe (Sp. Herrero).

atsidi yázhini' biyé', the son of the late little blacksmith.

tqáyonf', the kneader (baker); ba il'fīni, the baker (of bread).

atsidi biyé', the smith's son.

hastqín ditsá'i, Mr Interpreter (the interpreter, both of English and Spanish).

hastqín nalzhéhé, Mr Hunter; nalzhéhé tso, the tall hunter; nalzhéhé næs, the long hunter; nalzhéhi tsósi, the slim hunter.

Some names indicate the possessions or habits of the bearer, such as riding a particularly colored horse. They also allude to some special incident which occasioned the name.

ashkhí bilf lání, the boy (man) with many horses; bilf lizhíni, black horse (he who rides a); bilf daalbaí (bilfíbai), roan horse (the owner of roan horses); bilf líkhízi, pinto or spotted horse.

hastqín bégāshi, Mr Cow; hastqín hashkán, Mr Hashkán (yucca syrup); debé lizhíni, black sheep; tlízi tso, big goat; tlízi lání, many goats; tlízilgaí, white goat; tlízi dághālgai, white-bearded goat.

jíshinbidá', the nephew of the late man with the medicine pouch.

wúdabizhé'è', the father of wudy.

ná'níl lání, numerous slaves.

bisléni biyé', the son of him who wears leggings.

hashkhé yázhe, the little warrior.

hastqín hashkhéhe, the scolding man.

diné' yiyisqíni, he who killed a Navaho.

belagána yiyisqíni, he who killed an American.

t'ó' tsaí, he who lives near this weed (or large grass [?]).

hastqín dílāghūshi, Mr Howler.

hastqín dílāghūshin bitsói, the grandchild (nephew) of the late Mr Howler.

chāhi, the man with the hat.

hashkhé tqādeyá, who seeks war.

nīkākéi, wounded face.

ndishbá'ni biyé', the son of the late warrior, also called ashkhí dílāghói, the fleet boy.

nā'ishíshi, he who was stung.

dlād (?). nālyfshi (?).

The names of the clan to which one belongs are often adopted. Tribal names indicate the descent of the bearer. See gentile system.

tqáchīni, "red water people," or tqáchīni tso, the big tqáchīni.

tqábâha, "on the shores," a tqábâha.

honaghá'ni næs, the tall honaghani.

tqótsōni biyé', the son of a tqótsōni (big water).

tsínājīni, a member of this clan (the standing charred or black-streaked tree).

nakhaí dinæ'ë', Mexican clan.

khīn lichīni tso, the big red house (clan).

dzīl tlāni, crevice or cañon in the mountain.

chīshi, the Chiricahua.

nashgáli, the Mescalero.

naāsht'ézhi biyé', the Zuñi boy.

tlízi láni, many goats.

tqodichīni tsósi, the slender tqodichīni (bitter water man).

NAMES OF DISTINGUISHED CHIEFS AND WARRIORS

hastqín nábahi, the man of (constant) war.

nat'álēl, the orator ("he who will speak"), who was also called hastqín khe ntsái, Mr Big Feet (Sp. sarcillo largo, large earrings).

hastqín nātānin, the late Mr Chief (Narbona).

tqaqānān bādāni, the son-in-law of the late Texan (Manuelito). The universal respect in which he was held is shown in his other name, ashkhi diyfni, the holy boy.

kākēin, the late wounded by an arrow (Cayetanito), brother of Manuelito.

chā' dīl'oi, plushy hat (another brother of Manuelito).

bisénde, chief Vincent.

bitsó yeyáltqī'ī, the stammerer, Guanamuncho, who was also known as tqótsōni hastqín, the tqótsōni man.

chíná', or tqótsōni hastqín bidá', the nephew of Guanamuncho (Chino).

bidághai, the bearded one, or hashkhéichī' dāhīlāwhō, who hurries to war (Barboncito).

gīshdflīdnī', the late man whose cane burnt (Armijo).

māsīn, the late māsī (Tomás [?]).

bié lizhīni, black shirt or garment (Mariano Martinez).

díwākhān (meaning unknown), Chapaton.

kī neinfhi, who distributes horses.

hĩ neinfhin biyé', the son of the late distributor of horses (Chiquito).

bfla náyiskháli, whose fingers were shot away.

hashkhé náfdiltq̄ni, the warrior who grabs the enemy (in a charge).

nagé neitq̄ni, the shield carrier, who uses the shield well.

khæsini biyé', the son of the late "tender falling stick."

bilf dotl'izhi, blue horses and his brother, bilf daalzhi, black horses, both of whom were killed on the same day.

Jesus Albrizzo, the official interpreter for the Navaho signing the treaty with the United States Government at Fort Sumner in 1868, gives the names of those Navaho chiefs as follows:

Barboncito, achfidahilawhō, who hurries (to war).

Armijo, gish dflidīn, the late burnt cane.

Dalgario, chāchōsh næz, long chancre.

Manuelito, tqaqānān bādāni, the son-in-law of the late Texan.

Largo, bogūd bijā, ears in his knees (because he frequently put his head between his knees).

Herrero viejo, atsfdi sāni, the aged blacksmith.

Chiquito, chā' lāni, many hats or head bands.

Muerto de hombre, dichīn bilqéhe, dieing with hunger.

Hombro, hastq̄n bowhōsīn, Mr Shoulders.

Narbona segundo (?).

Guanamuncho, tqōtsōni bilf lāni, the tqōtsoni (his clan), with the many horses.

NAMES OF AMERICAN RESIDENTS

American residents and traders are usually given a descriptive name after a brief residence.

nātsóho, the man with big eyes.

béshbowhoi, iron tooth (who has gold-filled teeth).

nakhai sāni, the old Mexican.

nīkhæznfli (nākhæāznfli), the man wearing glasses.

dághalchí, the red mustache.

nakhai yázhe, the little Mexican (American speaking Spanish).

kös nāz, the long neck.

ba il'íni tso, the big baker.

atsídi, the blacksmith.

khegúdi, short-foot.

bílă' líkhízhí, spotted hand (tattooed).

chíshqăł, club nose.

níhizhíhi, the sawyer or carpenter.

nāłtsós il'íni, the clerk; nāłtsós nās, the tall clerk.

nāłtāni, the agent; nāłtāni snās, the tall agent.

besh biā, the iron shirt (worn by early Texas rangers).

hastqín nās, the tall man; hastqín lbaí, the gray suit man;

hastqín hoshkédi, the squaw man.

azé il'íni, the doctor.

ednishódi (əndeishóti, wao drag the dress), priests and ministers. They are also given individual names, such as the large, the small, the tall, etc.

esdzáni, or belagána esdzáni, American women (slender, tall, large, etc.

TRIBAL NAMES

The intercourse of the Navaho with other tribes was very limited.

dzilghá, the White Mountain Apache, who were also called tsástqísi, shins.

chíshi, the Chiricahua.

gwayáli, the sleepy one, Geronimo, the Apache.

lí t'áisił, he who checks his horse, Victorio, the Apache chief.

nashgáli, or mashgáli, the Mescalero.

bəqai, the Jicarilla.

nakétłai (flatfooted enemies), the Pima. This name is also applied to the Yaquis of Mexico.

nódă'ă, the Ute.

báyodzĩn, the Paiute.

dĩlzhǎǎ, the Yavapai.

goqnĩni, the Coconino.

nā lāni, many enemies, the Comanche.

kháwa, the Kiowa.

diné', the Navaho, also Nawehó, or nawehó ínlzhĩni, Navaho Indians; or, goyóde (probably corruption of Spanish coyote).

khĩs'áni, the Pueblo Indians (general name).

má'ideshgĩzhni, the coyote pass people, the Jemez.

khĩnhichĩni, the red house people, the San Juan.

tqogá'ni, the Cochiti.

nātqóho (anā), enemies at the water, the Isleta.

tqówhũk, the Taos.

tqo lāni, much water people, the Laguna.

debé lizhĩni, the San Felipe (black sheep people).

tłógi, the Zia.

tqo hajilóni, people who draw water, the Santo Domingo.

khĩn łagaĩni, white house people, the Sandia.

kĩsh chĩnt'i, a line of alder (strung out), the Pajuate.

naasht'ézhi (blackened enemies), or zhũni, the Zuñi; chāyo'áli, the scarabee, a noted Zuñi chief of some sixty years ago.

áyakhĩni, people of underground houses, the Hopi, who were also designated in terms showing genuine contempt for them, as mógi (monkey), Moqui; tséest'é iyáni, paper-bread eaters; hon-ĩgaĩ iyáni, hominy or stew eaters; bichái shijéi, who live in dung; bitłá, bedĩsdóni, spanned (taut) buttocks; bilłzh yetqádi-gĩsi, who wash with urine; bitsĩ bitqágigúdi, who wear short hair in front.

The Oraibis were named ozaĩ.

nakhai lizhĩni, a black Mexican, or nĩyĩli, the negro.

nakhaf, the Mexican (general name). They were also called nakhai diyĩni, the holy Mexicans (ironically); or nakhai doda-tsaída, who do not die, the immortal Mexicans; or ba ditłógi, fluffy bread; or nakhai ditłói, hairy or plushy Mexicans, or tsíbala, shawls. Names like nakhai tso, the big Mexican, and nakhai

sīl, the steaming Mexican, and nakhai kākēi, wounded, and nakhai disós, the sparkling Mexican, are presumably names of individuals.

gāmali, or māmali, Mormons.

bichá' nnézi, long hats, or the old Mexicans.

The old Texas rangers came in for the following names:

besh bié, iron shirts, or tqaqána (Sp. tejana), or akhál bistléi, leather leggings.

belagána, the general name for Americans. Other designations were beshfya, baqána (Texans), nasīliyáni, probably corrupted from the Spanish; nādotl'izhi, who have blue eyes, which was the Zuñi name for Americans.

The following are descriptive of the first or early American soldiers:

bijā yēnjái, who sleep on their ears; nāgo dīldóni, who shoot from the side; bogúđ dokáli, who burn their kneecaps (at the fire); shábidīlchf, sunburnt, and tqāji ndes'ái, whose forehead protrudes, so called from the shape of the cap.

WORDS

t'áyisi nízhi'í qaf ínlyé? what is your real name? (referring to the name given by the family).

yízhi ishlé (íshlá, ideshlí), I give it a name, I name a child.

qailábā? whose daughter is she?; or qailá biché', or bitsf? whose daughter?

yinshyé' (nt'æ), I am called so and so; qat'ish olyé? what does it signify? what is it called?

NAMES OF PLACES

The geographical knowledge of the Navaho is practically limited to his immediate surroundings. Local names, therefore, designate places in or around the Navaho country.

A butte, peak or a projecting point in a mountain and mesa is frequently suggestive of a name for a locality.

dziłnáodili, Huerfano.

dziłnáodili chíli, (small) Huerfanito.

tséłgishi, rock pass, Angel's Peak.

dziłditłóí, stubby mountain, Black Mountain (near Red Lake).

tsézhini, black rock (near Fort Defiance).

tséłqǎ', in or between the rocks, the Haystacks (though, too, the head of a cañon, or a group of lone-standing, isolated rocks, are called tséłqǎ').

má'itqo tséłqǎ, Coyote Spring in the cañon (of Black Mountain).

tséłchídahaskháni, red round rock, of which there are several.

A locality on the north side of the lúkachúgai mountains is generally meant.

tsenakháni, the lone round rock, Roundrock.

bísdotłis des'áhi, blue adobe point, near Roundrock store.

bísdalitsǒ, two yellow adobes, Two Gray Hills (Crozier, N. M.)

tséálchí' nágai, the white rocks meet, place about eighteen miles northwest of Two Gray Hills.

tsě bidáhi, the winged rock, Shiprock (peak).

tsélagai dez'á', white rock point, Bluff City, Utah.

tsénajīn, black peak, Cabezón, N. M.

doliǒn, or yá'níłzhīn, Los Torreones.

tsénashchī, the red round rock, Hunter's Point.

chézhīn dez'á', malpais point, St. Johns, Ariz.

nánzhōzh (nánizhōzh), bridged, Gallup, N. M.

ní haldzīs, a basin or cavity by natural formation, Bule's Park.

saí ếtsósi, the pointed or conical sand dune.

tsě'ếtsósi (tsěhetsósi), the pointed or conical rock.

Springs and bodies of water, often far between, are distinctive landmarks, and are sometimes indicated by meadows, old ruins, or trees and plants thriving in the vicinity of water.

abá'tqo, last water, Willow and Deer Springs, Ariz.

chā biná tqo, beaver's eye spring.

chītqo, red clay spring, Emigrant Springs, Ariz.

duwhúzhbitqo, greasewood water.

dzīl tqo binæs'áhi, water around the point of a mountain.

haltsó, the meadow, San Mateo, N. M.

tsóhotso, the big meadow, Cienega, now St. Michael's, Ariz.

kaī sá'ánī, willow mat, Tanner Springs, Ariz.

kaījinéltlō, braided willows, La Jara, N. M.

lúkā ntqēl, wide reeds, Ganado, Ariz. Some render this lúkā khīntqēl, the wide ruins in the reeds.

lúkādashjīn, ashy reeds, Keam's Cañon, Ariz.

lúkānāgai, lone white reeds, a spring at Hunter's Point.

mā'itqó, coyote's water, Houck's Tank, Ariz.

nāzísēttqō, gopher's water, Nacimientos, N. M.

nātqó sākai, Grants, N. M., which is also called besh dádikhāl, the closed iron door (probably Old Fort Wingate, near San Rafael, N. M.)

nādákā kēdilyēdi, where they plant cotton, Moencopie Wash.

sān bitqó, the old man's water, or nōdā'ā bitqó, Utes' river, the San Juan River.

nakhai bitqó, river of the Mexicans, or semītqó, the Rio Grande.

The Rio Grande is tqo bâ'āde, female river, the Rio San Juan, tqo bakhá'ē, male river.

shāsh bitqó, bear spring, Fort Wingate, N. M.

tqāhótqēl, where the water spreads, Largo, N. M.

tqāhótqēl nlīni, Cañon Largo.

tsīd bitqó, glowing coals' spring, thirty-five miles west of Nacimientos.

tsīd bitqó bokhói, coal spring cañon, Cañon Blanco, N. M., also called tsébāālgai, white rock edge.

tqóqtǎ', between rivers, Farmington, N. M.

tqo díchí, bitter water, spring between Cabezón and Cañon Bonito, N. M.

tīs nāsba', warpath cottonwoods, near Four Corners.

tīs ndeshgīsh, forked cottonwoods, near Two Gray Hills, Cottonwood Wash.

tqō dokózh, salt spring, Sulphur Springs at Bennet's Peak.

Salt springs, of which there are several, are also designated by tqō dokózh.

tīs ntsa chélf', it flows toward a large cottonwood, Bluewater, N. M.

tsékístqóhe, spring in the crevice of a rock, Cubero, N. M.

tīsyakhīn or tīsyá, houses below cottonwoods, Holbrook, Ariz.

tīs nāsba's, cottonwood circle, Bosque Redondo, N. M.

hūéldi (Sp. fuerte or huerte, fort), Fort Sumner, N. M.

tqósédó', hot spring, Navajo Springs, Ariz., and San Rafael, N. M.

tqēlchíntī', a line of tulips or flag iris, Oak Springs.

tqēl sákhád, cluster of flag iris, Gallegos Cañon.

tsíná'él dasá'a, at the boat, Lee's Ferry.

tqolchíkhó', red water cañon, Little Colorado River.

dził labai bokhó', gray mountain cañon (at the junction of the Little Colorado and San Juan rivers), Grand Cañon.

tqo nānesdīsi, tangled waters, Tuba City, Ariz.

tqo nāneshzhē, fringed water (Black Mountain district).

tqo tsósi, slim water, Concho, Ariz.

tqúnłtsīli, crystal water flows out, Crystal, N. M.

tsé'ilí' (tséyí' ilf'), it flows into the cañon (de Chelley), Tsehili country.

chínlí', it flows out, the mouth of Cañon de Chelley, Chinlee, Ariz.

tqótso, the big spring, on the south side of the Lukachukai.

tīs biyági, under the cottonwoods at Chinlee.

tīsyá láni, under a cottonwood grove.

yōtqó, bead water, Santa Fé, N. M.

oljětqo, moon spring, Oljeto, Utah.

nāsīsītqē, Rio Puerco of New Mexico.

khīntqēldæ nlīni, which flows from the wide ruin (Aztec, N. M.), the Animas River.

tsēdögōi nlīni, flowing by the projecting rock (butte), the La Plata River.

khīntqēl, wide ruins near Pueblo Bonito, another near Manelito, and also on the Colorado Wash.

tsīyī' khīntqēl, the wide ruins in the woods, a place south of Gallup.

chīlchīn bitqó, or kīlchīn bitqó, Sumach Spring in the Black Mountains.

chéchīzhi tqó, rough rock spring.

lō qālī', fish spring.

shā' tqó, sunny or south spring, several springs on the south side of various mountains.

nāāzlīni, the crooked spring, between Ganado and Chinlee.

hasbīdi tqo, turtledove spring.

jāditqó, antelope spring, Jettyto Spring.

tsāghānlī', the water flows through the rock (Black Mountain district).

Other names are descriptive of local peculiarities and otherwise.

gád sākhdā tsétqā', a cluster of junipers in the cañon, McCarthy's, N. M.

tlóchīni, wild onions (which were numerous at), Ramah, N. M.

tlóchīn náholýě, which is also called wild onions, Gallo, N. M.

tqóji hūdzō, which plant was plentiful there, Woodruff, Ariz.

áqoyoltšíd, a tank of water, Jacob's Well.

khīn nānā'ā, the walled house, ruin built across a cañon, Box S Ranch.

bés sēnīl, stacked rails, Winslow, Ariz.

dlēsh ndīgai, almogen point, Allantown, Ariz.

khīn hóch'ó'ó', the ugly house, Manuelito, N. M.

khīn lāni, many houses, Durango, or other towns in the vicinity of the Navaho country.

khîn lāni dōkōōshkīd biyāgi, many houses below the San Francisco Mountains.

bēēldīl dāsēnīl, at the place of the peals (bells), Albuquerque, N. M.

bokhōhodotlīsh, Blue Cañon.

tsébiyāhaniāhi, a wall below a projecting rock, Pueblo Bonito. tséyī', in the cañon, Cañon de Chelley.

tséyī', in the rocks (near Cabezon).

āñē'ē' tséyī', the rear cañon, Cañon del Muerto.

tsfhidzo bihilī', the flow of the fluted rock, Monument Cañon.

tsin beekhīni, wood houses.

tqāyidelzha (?)

gīni bit'ō', hawk's nest.

dēl nāzīni, standing cranes, both places in the vicinity of the San Juan River.

tséyā chahałqēl nlīni, which flows along "darkness under the rock," Chaco Wash and Valley.

tséhotso, meadow in the cañon, Fort Defiance, Ariz.

tsétqā' chīnlīnigi, the mouth of any cañon, where water flows out; tqē, a valley or puerco.

tsétsīltsō (chēchīltsō), the big oak.

sō' sēlā', the twin stars, starlike buttes, Washington Pass.

tīsbaf bitqo, cottonwood spring (Black Mountain district).

bitsfhūitsōs, a knoll at the base (of Black Mountain).

tsēāwæ, the baby rock, a small, lone pinnacle.

tsē ābēdi, at the milk rock.

tsāhotsoi biyāzhe, small cañon meadow, near Marsh Pass.

tqo ādīn daāzkhā, the waterless peak.

In Cañon de Chelley: tsē ntqēl, broad rock; jāābāni, the bat (pillar); tqo sākhā, pool of water.

tqē ndē, where they fall into the pit of water. The place of this name in the Black Mountain region was formed by the fall of water, and was formerly a much frequented watering place for game. The smooth surface of the abruptly descending walls of this pit offered no sufficient foothold, but entrapped the game

much after the fashion of the early native pit traps.

tqō danastqāni, or tqō dahastqāni, where the water is dammed.
tqō bidádestlīn, where the water is walled up.

NAMES OF THE NEIGHBORING PUEBLOS

The names of the neighboring pueblos are of long standing.

áyakhīni, people of the kiva or underground houses, the Hopi pueblos. The individual pueblos are named as follows:

East Mesa Villages: nāsháshi, the bear people, Hano; atqá' khīni, the people of the middle houses, Sichomovi; áyakhīni (presumably nýyá'khīni), people of the kiva, Walpi.

tqálahoghan is possibly identical with the destroyed village of Awátobi, while adégi khīni, the people of the houses yonder, near adégi tqō, yonder spring, designates an extinct village one mile south of Hano.

Middle Mesa Villages: tsétsokid, the hill of boulders, Mashongnovi; khítsīli, meaning, probably, the houses in ruins, or houses resembling ruins, Shumopovi; khínáztī', the houses strung out in a line, Shipaulovi.

Western Mesa Village: ozaí, Oraibi. Some suggest a derivation from ōd zaí, numerous eagle traps (?).

ozaí biyázhe, little Oraibi, Moencopie. To this should be added, nādákā kēdilyédi, the cottonfields, Moencopie Wash.

hako'nī, people of Acoma.

tqo lāni, much water, Laguna.

tqo lāni biyázhe, the offspring of much water, Acomita.

tqo hajilō, they draw water, Santo Domingo.

saí behoghān, sand houses, San Felipe.

tqógā', Cochiti.

tl'ógi, Zia.

khīn nodōzi, striped houses, Bernalillo.

tqo hajilēhe (?)

khīn lāgaí, white house, Sandia; khīn lāgaí is also used for Navaho station.

khîn lichí, red house, San Juan.
 tqówhŭl, running or swift water (?), Taos.
 nātqóho, enemies at the water, Isleta.
 má'ideshgīzh, coyote pass, Jemez.
 kīshchíntŭ', line of alder, Pajuate.
 kīshjīn, black alder (?), Cebolleta.
 nāāshŭézhi, blackened enemies, Zuñi.
 tséhoghān, Thunder Mountain.
 tsédodōn, two peaks southeast of Zuñi.

NAMES OF MOUNTAIN RANGES

Names are also given to the neighboring mountain ranges.

chúshgai (chōshgai), white spruce, Chusca Range.
 tqúntsa, large water, Tunicha Range.
 lŭkāchúgai, which is rendered by some as the reeds at the white spruce, Lukachukai Mountains. These three are names of one and the same range.

dzīl náōzīli, the mountain surrounded by mountains, Carriso-Mountains.

dzīlŭjīn, the black streak mountain, Black Mountains.
 nādsīs'ān, the enemies' hiding hole, Navajo Mountains.
 In addition, a mountain is sacred to each of the cardinal points.
 sīsnaĭjīn, (woman's) standing black belt, Pelado Peak, north of Jemez pueblo. This is the sacred mountain of the east.

tsódzīl, mountain tongue, Mount Taylor of the south.
 dóōkoshíd, San Francisco Mountains of the west.
 debéntsā, large sheep, San Juan Mountains of the north.

Other sacred mountains are the Carriso (dzīlnáōzīli), and the Huerfano (dzīlnáōdīli), and chōl'f (?), and dzīl esdzā, the mountain woman (?).

The mountain of the east, sīsnaĭjīn, Pelado Peak, is also called yolgaídzīl, or the white bead mountain, and its color is white.

That of the south, tsódzīl, Mount Taylor, is yōdotl'ízhidzīl, the blue bead (turquoise) mountain, and its color is blue.

That of the west, *dóókōshíd*, San Francisco Mountains, is designated as *dīchíhídžil*, haliotis mountain, with the color of yellow.

The mountain of the north, *debéntsá*, San Juan Mountains, is the *báshzhīnidžil*, or cannelcoal mountain, and its color is black.

džīlnáōdīli, Huerfano, is *ntlís džil*, or mountain of precious stones.

chōl'í is *yódīdžil*, mountain of variegated beads. The latter two mountains are probably the mountains of the upper and lower directions (*yā' ālní* and *ní' ālní*, middle of heaven and earth, zenith and nadir), the color of which is either *tsełchí'í*, redstone (red), or *altqās'aí*, varicolored.

The sacred mountains were brought from the lower worlds and placed in their respective positions by First Man. The mountains of the east, south, west and north also figure in various sand paintings, which they surround in their respective positions and colors.

The two last mentioned mountains, *dsilnáōdīli* and *chōl'í*, the latter of which is probably only legendary, do not figure in the sand paintings, but in songs and prayers. This is especially the case in the *hachæyātqéi*, prayer to the divinities, which usually begin from the summit of one of the sacred mountains.

WORDS

baghádi, or *hokádi*, on the mountain; *bagháđé*, from the mountain; *džil bilátqádi*, for instance, *chōl'í bilátqádi*, on the summit of the mountain; *bitsídi*, or *bitsíji*, at the base of the mountain; *biné'di*, or *biné'ji*, in the rear of the mountain; *biné'go*, to the rear of the mountain.

The locality from or toward which one travels is indicated by means of prepositions affixed to the name of the place, thus the affix "go" corresponds to our to, *yótqógo deyá*, I am going to Santa Fé; *tsáhotsogo deshál*, I shall go to Fort Defiance; *tséyi'go nsēyá*, I was at the Cañon (de Chelley); *tqógo iyá*, he went to the river (meaning any of the larger bodies of water).

The affix *ji* is used similarly; *khîn hochôji*, towards Manuelito. *dæ* corresponds to our *from*, *nânzhôzhdæ*, from Gallup.

di indicates in or at a place, *shash bitqódi*, at or in Fort Wingate.

qâgola, or *qâgosh diniyá*? whither are you going? *qâgosh nsîniyá*? where have you been?

qâdish nikhéya, or *qâdish naghân*? where is your home or house?

qadëshâ, or *qadësh ntî*? whence do you come? *nîzādæ*, from afar off.

kād nîkhîniyá, I return now, I return home; *kād nikhédeshdâl*, I will return or go home presently.

tqúntqêl bilá'di, or *bilá'go*, over the ocean, indicates every country and city beyond the ocean. Similarly, *tqúntqêl bilá'dæ*, from beyond the ocean.

wâshîndôn, or *yêshîndôn*, Washington, is sometimes used to designate other cities, and also as a distinctive landmark, thus, *washîndôn bilá'di*, *yushjishgi* (*yushchîshgi*), beyond or this side of Washington.

Cities like Chicago, St. Louis and Los Angeles, which have been visited by some, also cover many unknown localities.

NAMES OF ANIMALS

Animals are classified as follows:

naâldlôshgi, which walk on fours, quadrupeds.

nâ'nâ' (*ndaha'nâ'*), they creep, the lizzards, the reptiles, to which is added, *nâ'nâ' naldlôshdo*, which creep and walk.

tqâyî' nâldéi, or *tqaktlânâldéi*, which inhabit the water, water animals.

This latter group also embraces fishes of which few varieties are differentiated. This is probably due to the scarcity of fish

in the Navaho country, and also to the taboo placed on them, so that little if any attention is given to the varieties.

naät'ági, winged animals, birds.

Zoolatry is an important factor in Navaho religion and very few animals are excluded from worship or ceremonial use. In many instances witchcraft is attributed to these deified animals who therefor require propitiation by sacrifice and a smoke. On these occasions their secret or sacred name is used in addressing them, a list of which has been added at the end of list of insects.

THE QUADRUPEDS

THE BEAR.—The bear is assigned to the mountains. The origin of the various species is attributed to creation out of the several organs of mythical monsters, like shāsh náłkhai, the tracking bear, and esdzâ shāsh nádlehe, the woman transformed into a bear. Presumably this belief accounts for the reverence shown the bear, insomuch as the bear is ordinarily avoided. The regulations governing the meal of venison or bear are recorded elsewhere. (See Foods.)

shāsh, the bear.

shāsh tso, a large bear; shāsh łagai, the white bear; shāsh līkhízh, the speckled bear; shāsh baghāgâ hadsīsbaí, the silvertip; shāsh bikhé ntqēl, the bear with wide feet.

(shāsh) nashkhádi, (whose feet are spread), the black bear.

(shāsh) bīghānnæzi, long back, grizzly (?).

shāsh deishjā (?).

bijá' yadizfni, whose legs stand up (?).

bitqáhúnæzi, long body.

yátsoi, yellow chin, cinnamon bear.

shāsh biyázhi (biyázh), cubs.

tsēt'óhi, stub tails, a general name for bears.

DEER.—Deer and elk, as also animals allied to them, are hunted for their hides and sinew, which figure largely in the manufacture of the costume and ceremonial appliances. (Cf.

articles on the Chase, Tanning, Shoemaking, Leather work, Masks, Hats and Costume, the Hoe, Awl, etc.) The deer family is, of course, assigned to the mountains.

bî', the deer; bî' yāzh, fawn; bî' khâ', a buck.

bî' daālchíni, the children of the deer, as which the following are designated: jádi, antelope; dētqēl, broad horn (male of antelope); dzē', the elk; tsæ, small horn deer; debé tsétqā', the big-horn; nāgháshi, the male bighorn.

FELINES.—The felines, too, are found in the mountains. The aboriginal Navaho used the skins for their costume, though at present little use is found for them. Occasionally a quiver made of mountain lion skin is still to be seen.

nashdúi (nīshdúi, nshdúi, noshdúi), the wildcat; nashdúi dinæ'ě, the lynx people.

nashdúilbaí, the lynx.

nashdúitso, the mountain lion.

nashdúilkhízhí, the puma.

nashdúitsolkhízh, the leopard (extinct).

The following are probably mythical only: tsétqā' nshdúi, the cañon lynx; tl'ō'nshdúi, the grass lynx; halgai nishdúi, the meadow lynx.

músi (môsi), Sp., the domestic cat. Very probably the domestic cat is of recent introduction, and its name, músi, is a corruption of pussy.

THE COYOTE.—The coyote, a natural roamer, is given free range in mountain and valley without any specific district. Ordinarily the coyote is left unharmed, and frightened off or trapped to his death by a gun-trap.

The kit-fox is sought and highly prized for its skin, which figures as an ornamental dress of the masked personators, as well as of the masks.

má'i (nānshamá, I roam), the coyote.

má'itso, the wolf.

nātl'ěitso, wolf, mythical name for.

mâ'istsôsi, slender coyote.

mâ'i dotlísh, the kit-fox.

mâ'i litso (mâ'itsoi), the yellow coyote, small coyote, which is also called tsélālgai, the white (tail) tip.

THE RABBIT.—Rabbits are hunted or trapped for their meat. Originally the fur was braided with yucca, and served as a rude covering or wrap. The fibula of the rabbit is still used in preparing a ceremonial whistle. (See Whistling.)

gǎ', or gǎlbaí, the rabbit, cottontail.

gǎ'tso, the jackrabbit; gǎ'tsogaí, the white jackrabbit.

gǎ'íli, the fluffy or woolly rabbit.

THE SQUIRRELS.—The squirrel, an inhabitant of the mountains, is eminently fitted for the role assigned to it in various legends, of prying into the secrets of the enemy.

dlódzīlgai (dlózīlgai), pine or gray squirrel.

dlózishzhīn (dīlqíhī), black pine squirrel.

dlózishzhīn bināgha dadīlchígi, squirrel with reddish back.

hazaí, chipmunk; hazaítso, small squirrel; hazaí ałtsísi, small chipmunk; hazaístsôsi, ground squirrel.

tsídít'íni, rock squirrel.

tsékī nastqáni, ground squirrel.

nādobó'íni, invisible to the enemy (or eye [?]), small ground squirrel.

THE RODENTS.—Rodents have their abode underground. The ermine figures in decorations at various chants.

lætso (from lénũ, a nest in the ground), the rat.

na'ástsôsi, gray mouse.

jí' íni'fhi, the day thief, black mouse.

lēni bitqíni, underground track, field mouse.

nahoshcláhi, the jumper, small field mouse.

chînsnézi (chîshnézi), long snout, field mouse.

dlú'i (dló'i), the weasel, ermine; dlú'ílgai, white weasel; dlú'í litso, yellow weasel.

dlō' (dlū'), prairie dog.

naāzīsi, the gopher.

naāsht'ēi altsfigi (nahasht'ēhi), small field rat.

naāsht'ēitso, the kangaroo rat.

THE BADGER, SKUNK AND PORCUPINE.—These inhabitants of the mountains figure in decorations of some ceremonial requisites. The bite of the skunk is poisonous, and the animal is ordinarily avoided.

nahashchīd (nāshchīd, naāshchīd), which scratches out, the badger.

dā'sāni (dā' sā'ā), which sits up in a tree, the porcupine.

wōlīzhi (gōlīzhi), which urinates, the skunk.

wōlīzhi tso, the big skunk; wōlīzhi altsfigi, the small skunk.

wōlīzhīkhīzhi, the speckled skunk.

MODERN ANIMALS.—

bisódē (Sp.), the pig. The hog is not indigenous, nor do the Navaho raise any except in very few cases. It was most likely first brought to their country from Old Mexico as the name, bisódē, a corruption of the Aztec pitsotl, seems to indicate.

bichf'yedītsqīsi, which whips with its snout, or bichf'yedīlqāhi, strikes, or yedilōhe, which ropes with its snout, the elephant.

hī bīshghā dsiskīdigi, hunchbacked or hillback horse, the camel.

hī ndadeshkhīzhigi, the horse with speckled stripes, the zebra.

THE DOG.—The dogs found at every Navaho camp are a sorry looking set of mongrels but an invaluable asset in herding flocks of sheep. As a rule they are lean and mean, illfed and mistreated. Pups are early accustomed to the herd, and are frequently nursed by a goat of the herd.

hīchāi (lēchāi, lēchai, from hī, pet, and chā, ordure), the dog.

lēchāstōsi, the hound.

lēchāi bīf dīl'ōgi, a fluffy dog.

astōli, or lēchāstōli, a very small, dwarfy dog.

lēchā hasdli, a medium-sized dog.

līchāi bichf' dēg sâ'ânigi, with turned-up nose, a pug or bulldog.
 līchāi bijā ntqēligi, broad-eared dog, a spaniel.

lēchāi līchf, red dog; lēchālbaf, gray; lēchāzhīn, black; lēchālgaf, white; lēchāłtsōi, yellow, and lēchāłkhizh, speckled dog.

līchāitso, the American dog, which is usually larger, therefor, the big dog.

THE COW, SHEEP AND GOAT.—Cows, sheep and horses were originally obtained through raids upon the neighboring Pueblos and Mexicans, and later through rations issued by the Government. At present practically every family is possessed of a flock of sheep in addition to a band of cattle and horses, making their condition one of comparative affluence.

bēgāshi (vacca or bacca—shi), the cow; bēgāshi yāzh, the calf; bēgāshi dē altsīsi, small horned cow; bēgāshi bichó' ādīni, a steer; dōla (toro), a bull.

ayāni, the buffalo, robes of which were obtained through barter from the Plains and Pueblo Indians.

debé, the sheep; debé bichú' ādīni, a wether; debé dolkóli, marino sheep; debé yázhe, a lamb.

dēnāstā' (dolkóli), horns turned downward, a (marino) ram.

tłízi (tlísi), the goat; tłízi ditłóhi, or tłízi fli (dē fli), angora goat; tłízi chû', or tłízi khâ', buck.

tłízi lizhín, black goat; tłízi dotłízhī, blue goat; tłízilgaf, white; tłízilkhízhi, speckled; tłízistlíni, freckled; tłízilbá'i, roan; tłízishtlíshi, copper color; tłíziltsōi, yellow; tłízilchfi, red goat; tłízi yázhe, a kid.

THE ANATOMY OF ANIMALS

Illustrations are taken from various parts of the horse and sheep. For comparison see "Anatomy," page 80.

debé bitsānlai, the various anatomical parts of the sheep.

bitsītsín, its head and skull.

bidé, its horns.

bīnā, its eyes.

bichf, its nose.

bīnf, its nostril.

bīnākēd, its eyegroove.

bijá, its ear (lobe).
 bijéyí, its inner ear.
 bizé, its mouth.
 bidá, its lip.
 ĩ biyádā, the lower lip of
 a horse, or its chin.
 bowhó, its tooth.
 bizāhatá, its palate.
 bitsó, its tongue.
 ĩ bakhági, or debé khági,
 horsehide.
 bitsf, its flesh (venison, mut-
 ton, beef).
 bidí, its blood.
 bagán, its paws.
 bijád, its legs.
 bitsé, its tail.
 bijíłchf, its anus.
 bizíz, its penis.
 bichúg, or bíchó, its testi-
 cles.
 bichá, its dung.
 bilízh, its urine.
 akáí, the rump.
 abé, the udder, or the
 milk.
 bīshghán, the backbone and
 back.
 biyíd, its breast.
 bitsf, its hair.
 bitsīghá, its mane.
 baghá, its wool or fur.
 bitsín (bitsn), its bone or
 carcass.
 aká, the fat or tallow.

tsīghá, the brains.
 aqádītán, the joints.
 bikhé, its foot.
 bikhéshgān (behéshgān), its
 claw, hoof or cloven-foot.
 bikhétso, for instance, bí-
 bikhétso, a toe or cloven-foot
 of the deer.
 behétsós (bikhétsôs), its
 ankle sinew, the small toe on
 foreleg of sheep, cat, deer, etc.
 bizól, its windpipe.
 bizági, its crop.
 aghás, the gullet, esoph-
 agus.
 bijáshkāsh, the kidneys.
 bibíd, its stomach.
 bitsá, its ribs.
 bizíd, its liver.
 bijéi, its lungs.
 bijaidíshjöl, its heart.
 abid dāgi, the orifice of the
 stomach, pylorus.
 abíd ikhíni, or abíd díshjoli,
 the lesser intestines.
 abíd ántf, the spleen.
 bichf, its entrails.
 achf tsqās áťĩ, the colon
 and larger intestines.
 achf dotlízhi, the midriff
 (diaphragm).
 bichf nahinestséi the inter-
 locked entrails (probably the
 same as lesser intestines).

bitsó' azís, the placenta of
sheep and goat.

atsós sís, sweetbread (pan-
creas).

adlégo, the marrow of the
horn (of deer, mountain sheep,
etc.)

habíd jīgaf, the tripe.

WORDS REFERRING TO ANIMALS

mā'i nādlósh, the coyote trots, which is said of most animals.

naghá, it walks, is said of most quadrupeds.

ndzití', it rushes or runs quickly, is used of lizzards, rabbits,
rats, etc.

tísh ná'ná', the snake crawls.

shásh baghán, a bear's den; baghán, a lair; á'án, a burrow.

hōnsh'ó'gi, a bear's den.

mā'i dōdlóshi, a fleet coyote.

duitsída, it is mean (a bear).

nashdúi bēikhá, the sand painting of the wildcats.

bitsín, or tsín, a carcass.

dí'fl, or dítsós, bushy; dítló, fluffy; dí'fl, dítsós and dítló,
may be said of bedding (yatqél), blankets (beēdládi), and other
objects, while chōsh dítló, or dí'fl, may be said of a caterpillar,
but not chōsh dítsós.

THE HORSE

Horses are kept for breeding, riding and driving purposes. They are rarely fed, being turned out at large after use. Even when at work little or no feed is provided, as the Navaho is indifferent to the needs of his horse. Yet they thrive where others of their kind might starve, and in addition give remarkable tests of endurance.

Horses are usually broken at about the age of four. They are then singled out from among the wild herd and hitched to a post for a day and night without food or drink. Driving horses are hitched with a broken horse to a wagon, and in course of time learn their lesson, which is anything but thorough, since

the Navaho is as poor a driver as he is a horseman. After a riding horse has been starved in the above mentioned manner a saddle and bridle is forced upon it, the rider mounts and allows the horse all liberty to rear and jump and buck until the animal relaxes from sheer weakness. It is then tied to a post and given to drink, only to remain hitched there throughout the night. It is gentler when mounted next morning.

Words referring to the horse and riding.

- hī*, a horse.
hīlgai, a white horse.
hī dīl, a large, strongly built horse.
hī dotlīzhi, a blue (gray) horse.
hī lichfi, a red (sorrel) horse.
hī hitsōi, a yellow horse.
hī labá'i, a roan horse.
hīzhīn (*hī hīzhīn'gi*), a black horse.
hī yistlīni, a freckled horse.
hī likhīzhi, a speckled horse.
hī dinīlzhīni, a brown horse.
hīlqīni (*hī nīlqīni*), a mouse colored horse.
hīshtlīshi (*yishtlīshi*), a copper colored horse.
(bi)tsīghahīzhīni, a black-maned horse (color of body light).
tsīghahīlagai, a white-maned horse.
tsīghahīlichf, a red-maned horse.
hī chūgi, a stallion.
- hī bakhá'*, or *hī bichúg qā-á'nīli*, a gelding.
hī bá'ád, or *hī tsá'i*, a mare.
lē yázhe, a colt.
hī iskhá'i, a three or four-year-old foal.
hī yáshchīd, filly foal (three or four-year-old).
hī dozhóhi, an unbroken horse, a bronco.
hī izhód, a broken, gentle horse.
tqéli, the burro.
tqelābái, the gray burro.
jānāz (*dzānāz*), long ear, the mule.
tsétqá' hī, a mustang.
hī daāłchīni, wild (unbroken) horses.
hī nā'iyéhi, a saddle horse.
hī nālbási, or *tsin neílbási*, a driving or work horse.
hī nāshiyé', *hī shoyél*, I am horseback.
hībē nashá, I travel horseback.

hī bikīdasēdā', I am astride.

hīshīl naldlōsh, I ride horse-back (trots with me).

hī nālgýēd, the horse bucks.
nalgyēdi, a bucking horse.

aqādestqāl, he steps evenly,
paces.

bagāl yāt'é', his gait is good,
easy gaited.

hī naljá', the horse leaps.

hī nōltqfl, the horse lopes.

yīldlōsh, the horse trots.

hī shīl ndzītf', or hī shīltqā-
dilyēd, the horse runs (with
me).

ātľā dahalné', he raises be-
hind, he bucks (in the rear).

hī yóælāghud, a runaway.

hī dflawhō', a fast horse.

hī nēldzīdi, a shy, plunging
horse.

hī bīyānahalyfzi, a shy horse.

hī shīldesyīz, the horse shies
with me.

hī nāshīlgō', or hī shændsfl-
qāl, the horse threw me.

hī sfstqāl, the horse kicks
me.

hī ādītqāli, a kicking horse.

hī shīldadestsīn, he paws at
me, a rearing horse.

hī shīshqāsh, the horse bites
me.

hī shīkīdiltqāl, the horse
stepped on me.

hī alķīdasēdā', I ride with
another on a horse (two sit
together).

hī shidī'nf, the horse is "siz-
ing me up," watches me.

hī behētl'öl (bikhētl'öl), the
hobble.

hī behētsf' beestl'ó', the horse
is hobbled.

hī ā'āl, the horse is eating
grain.

hī ilchózh, the horse grazes.

hī dahāshtl'ó', I hitch a horse
or tie him to a post or tree, I
stake him out (hī dahastl'ó', he
is tied), or hī danāhashtl'ö (da'-
ndahashstl'ó, many), I hitch or
tie a horse again.

bānūshjá, I feed grain.

banūshjöl, I feed hay.

hī yislós, I lead or bring a
horse.

hī yish'ésh, I bring two or
more horses.

hī yāhanáslös, I lead a horse
into (a stable).

hī yāhanash'ésh, I lead two
or more horses.

hī tsīnslós (hī chīnsh'ésh), I
take or lead them out of a sta-
ble or corral, or field.

hī tqāhislös (tqāhish'ésh), I
water horses, bring or lead
them to water.

hī baghán, a stable or shed.

ĩ bichúg qashníł, or achúg qashníł, I castrate a horse or animal, which is done with an ordinary pocketknife.	ĩ bitqín, a trail. ĩ bikhě, a horse track, or hoof, or shoe.
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THE SADDLE

A gentle horse is ridden bareback for a short distance, but very few riders show any desire of taking chances with a saddleless bronco. Riding, therefor, is usually done with a saddle and bridle.

The Navaho saddle consists of a saddle-tree covered with rawhide, and usually studded with several rows of brass-head tacks along the borders. The saddle-bar is made of cottonwood (tís), the cantle and peak of pine (ndishchí). The peak is not pommelled but either rounded or squared. Two pieces of rawhide covering the bar and peak are overlapped by another piece covering the cantle. Two straps lapped over the girth rings are then tacked to each side of the peak and cantle, whereupon the cinch or girth is attached to the right girth ring by means of a piece of rawhide, and the cinch strap to the left girth ring. The stirrup straps are usually fastened directly to the saddle-tree. The old box stirrups, which were formerly very general, have now been replaced by iron ones. The crupper, which in the early days was connected to the rear of the saddle by a wide belt of rawhide, has almost entirely disappeared.

For lassoing purposes the Navaho saddle is inadequate and was never intended for that. The Navaho, moreover, is not very skilled at handling the lasso, which he does afoot. After corralling or cornering a horse (steers are rarely lassoed) the rope is whirled above the head towards the neck of the horse. If successful the operator drops on his seat allowing himself to be dragged along until the horse stops when he is approached with much caution and timidity.

American saddles are at present much in demand. Ropes, too, are either purchased or made of buckskin, and sometimes of

horsehair. In dismounting the bridle reins are thrown over the pony's head and left dangling to the ground, or the rope is strung out within easy reach, or tied to a tree.

Girths or cinches are mostly purchased, but were also woven of yarn and plaited with horsehair. The saddle blankets are, of course, of native fabric. The hobbles, which are invariably tied to the saddle, are made by the Navaho of rawhide. The blanket, and sometimes a sheep pelt or two, are secured in a bundle in the rear of the saddle. Cantinas and saddle-bags are usually added to modern saddles.

Words referring to the saddle.

hī biyāel (horse's pack), the saddle.

áyāsēnil tsfnigi, the saddle-tree, or the wood including peak, bars and cantle.

áyāsēnil, rawhide cover of the bars and peak.

fnashjēi, the snugly fitting cover of the cantle.

āsēnil, the girth rings for the cinch and strap.

hī biyāel bikīnāztī', the two straps saddled to the girth rings.

āchoshtfól, the girth or cinch.

āchoshtfól bāsēnil, the rings of the girth.

āchoshtfól bēelchī'dīdló', (which draws it together), the cinch strap.

bīdēs'ēs, the stirrups; bīdēs'ēs bitfól, stirrup straps.

hī biyāel bikēde hā'á', the saddle-bags.

akēēsēnflī, or akēēsīltsósi, the small cantinas.

hī biyāel bigísh, the saddle seat.

agísh dāsīltsósi, the small seat blankets used in riding.

besh hichí i'ādālkháli, the brass tacks for decorating the saddle.

akídahī'nflī, or akhádahā'nflī, the saddle blankets.

bitsā ātī'gi, the crupper and belt attached to rear of saddle.

hī biyāel alnā' ī'āhigi, the crossed saddle, the pack-saddle. This is not much in use since light transportation, such as of wool, flour or eatables, is done with the ordinary saddle.

hī biyāel bidā' daqā'á, (projecting saddle rim), the pommel, sad-

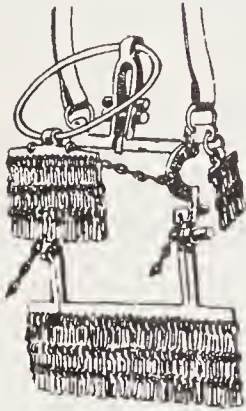
dle horn on modern saddles. Navaho saddles are not decorated, but *bikīnashchā*, decoration or design, is used for the American saddle.

lī bikīdahashnī, I saddle a horse.

bikīda'nshdā (*bikīdanāedā*, *bikīda'dīneshdāl*), I mount.

ādāshā (*ādāyā*, *ādādeshāl*), I dismount.

THE BRIDLE



Bits are made by native smiths of old horseshoes and iron scraps. A hackamore ring is attached to the lower part and is often decorated with chains dangling from it as shown in accompanying cut. The headstall, consisting of brow band and cheek straps, is often made of common rawhide, decorated with heavy silver plates, and is a great favorite with women on festive occasions. Bits and headstalls are now usually purchased

at the stores.

A rope is sometimes looped over the nose of a horse and serves as a bridle without a bit.

azātī', the bit and bridle.

azātī' ntqēligi, the wide bit, the old Navaho bridle bit.

lī bizāstqān, the bit (across the mouth of a horse). This word is rarely used.

azātī' binītlōl, (face strings), the cheek straps.

azātī' bitlōl, the reins or lines.

atqānāntī', the brow band.

ānī kīdaān, the halter.

azānāstī'īgi, the neck strap.

āyadā bāsā'ā, the hackamore ring.

āyadā nāntī', the chains below the bit.

THE QUIRT (WHIP)

The quirt is indispensable in riding and is swung continuously, in addition to vigorous jabbing of the heels into the horse's flanks.

The quirt is slipped over the wrist by means of a loop by which it is also slipped over the pommel of the saddle in dismounting. Spurs are not generally used.

bēētsqís, a whip, or quirt.

nánstsqís, I quirt or whip it.

THE HARNESS AND WAGON

Harness and wagons of any kind were not in use by the early Navaho, but are of quite recent introduction. They are issued by the Government, though many prefer to purchase a better grade of wagons and harness, including light rigs and buckboards for driving. The farm wagon is used for freighting, hauling wood, and often for travelling.

With the introduction of harness the plow, harrow, scraper, mower and rake rapidly followed.

THE HARNESS.—Words referring to the bridle will be found on preceding page.

ākīnāztī', "put around," the harness.

azātī' bitlól, the lines or reins.

azēdetqáni, (put on the neck), the collar.

azēdeinflī tsīnigi, (wooden things for the neck), the hames.

oshkīsh útī'igi, (side line), the traces.

chōshtlól (āchōshtlól), the girth.

binfgo'ā' bātqís itī'igi, the harness saddle.

bīshghāgo ntī'igi, the back strap connecting with crupper.

bitsá ātī'gi, the crupper.

bitlāya nāntī'igi, the (rear) bridging.

hī bichf', the horse's nose, the nose-bag.

baghādīsh'nīl, or hī bikīnā'ashtlō, I harness a horse.

hī bānādeshnīl, or ākīnāztī' bānādeshnīl, I unharness a horse.

THE WAGON—and its parts.

tsīnābās (tsīn nābās), the wagon.

adāgi danaskhēsigi, or tsīnābās bidāgi danaskhēsigi, the neck-yoke.

hī bitqágo na'áhigi, (which extends between the horses), the wagon tongue.

ātlayá dasēfli bānanā'áhigi, the double-tree.

ātlayá dasēfli, the single-tree.

ātlayá dasēfli bi'lī'áhigi, (the vertical pin of single-trees), the wagon hammer (queen bolt).

tsínábâs bitsá bānanā'áhigi, (which extends for the box), the bolster.

tsínábâs bitsá bānanā'áhigi bi'lī'áhigi, the king bolt.

tsínábâs bijád, a wagon wheel.

tsínábâs bijád tsín bináz'áhigi, (wood around the wheel), the felloes.

tsínábâs bijád bīnāneskháligi, (lock the wheel [?]), the spokes.

tsínábâs bijád besh bīnaz'áhigi, the tire.

tsínábâs bijád bitsītsín, (the head of wheel), the hub.

tsínábâs bijád bīnālāghūligi, (in which it turns), the axle-box.

tsínábâs bijád bi'lanāgfsigi, (around which it turns), the axle.

tsínábâs bijád bānānā'áhigi, (which extends for the wheels), the axle-tree.

tsínábâs bijád bebīndīdlóigi, (which binds the wheel), the brake and the axle nut.

tsínábâs bīshghān, (its backbone or spine), or tsínábâs bigfsh nanā'áhigi, (which extends at its division), the reach or coupling pole.

tsínábâs bīshghān bi'lī'áhigi, the coupling pin.

tsínábâs bijád bebīndīdlóigi bitqánānā'áhigi, (which is between the brake-shoes), the brake-beam or bar.

tsínábâs bitsá', the wagon box.

bikídahasdáigi, the seat.

tsínábâs bikéstqūigi, the wagon cover.

tsínábâs bitsá, (ribs), the wagon bows, or tsínábâs bitqāsi das'áhigi, (projecting on the sides), the bows.

ná'āsbâs, I drive.

nanā'āsbâs, I turn.

nanfgo qá'āsbâs, I turn aside; nat'ā qá'āsbâs, I return.

qēl, a load of freight.

tsínábâs bī qēl ẽ'eshlě, I load a wagon.

tsínábâs bī qāishqé, I unload a wagon.

ndeshqēl, I haul freight.

ba'ndeshqēl, I haul for another (mentioning for whom).

tqādīmfl dahidédlōgo ndeshqēl, I will haul three thousand pounds of freight. The Navaho do not know the value of weights. Expressions referring to hauling and weights are comparatively recent and coined to meet the requirements of traffic.

dukwí bâ'ilfgo ndeshqēl, I will haul for so much, or for how much shall I haul?

ĩ'ishníl, I put in, I load several things.

bi'yishjá, I put grain into the wagon, also other forms as the object put in requires: bi'yish'á, a box; bi'yishjól, hay or wool; bi'yishtqé, beef; bi'yishtqí, a pole or shovel; bi'yishlě, a rope.

tsínábâs bijé, axle grease.

tsínábâs yishjé, or nă'ishjé, I grease a wagon.

sitsínábâs keéltqô', or sitsínábâs sítšfl, my wagon is broken.

tsínábâs dījádi, a buckboard, buggy or light rig.

tsínábâs yázhe, a wheelbarrow.

nábāl, a canvas wagon cover.

besh aghádaás'á'igi, a bolt; besh dahólzhái, a chain.

aqínáldās, fallen apart, a broken wagon.

HORSE DISEASES

Diseases of the horse are not treated as a rule, but are allowed to take their natural course.

hī daātsá, the horse is sick.

hī biná diní, or nesgaí, sore or running eye.

hī bizahat'á' diní, or nesgaí, sore palate, the lampers. The horse is thrown by winding a rope around its feet, fore and aft, and slipping them under it. The lampers are then cut out with

a knife. A similar process is observed in castrating sheep, horses and bulls; áchō' (áchúg) qashníl (qǎ'áshníl), I castrate.

hī bakhági bitqátǎ qo'á, or hī bakhági dáhadísöl, or dá'dílchíl, loose skin; hidebound.

hī bilfzh yikhāhanáldzíl, (causes groaning [?]), gravel or kidney trouble.

hī bilfzh béč'nǎ', (presses), the colic.

hī bichá ná'alízh, (urine excrement), or hī bichá bagháúnǎ', (flows), diarrhoea or dysentery.

bilód, saddle galls, which are removed with a knife, or washed occasionally.

nánlqúd, he limps.

bikhé nesgaf, sore or tender feet.

hī bitsós qishgyésh (qégízh, qídesghísh), I cut an artery, I bleed a horse.

hī bizahatǎ yishgísh (shégízh, deshghísh), I cut the lampers.

HORSE RACING

Horse racing with light betting is frequently indulged in. On festive occasions betting is very heavy, losses being sustained with as much indifference as gains are accepted with joy and laughter. The Navaho is as cheerful a loser as he is a winner, and often stakes his most treasured possessions on a single issue.

A fleet horse is better cared for than the usual run of horses, and is often practiced and trained long before the race.

hī neiltqfhi, a horse race; hī shílyiltqé, I race a horse.

hī niqíl alghádītǎsh (alghádītǎsh), I race with another, we race together.

nihinshdá', I bet; béso, etc. benihínshdá, I bet money on anything.

hī bēnihinshdá', I bet a horse, and on a horse.

láida benihinsdsǎ, I have bet heavily.

sháhuneznǎ', I lost a bet; hī sháhuneznǎ', I lost a horse.

hī bēhunélnǎ', my horse won (on which I had a bet).

tsáhunezná', or hī sítšáji adflāghūd, (ran from me), I lost the bet, the latter expression meaning also, I lost the race.

hī shā'adflāghūd, (ran for me), I won the race.

REPTILES

What has been said of the quadrupeds in regard to worship, is true also of the reptiles. The snake, with the exception of that listed as the track snake, each has its prayerstick and corresponding song and ceremony, while the track snake figures in the sand painting, which it encircles.

The snake is ordinarily brushed aside, and its venomous bite remedied with native herbs. The cure is applied with good results to both man and animal, but is known only to a select few, who apply the concoction without ceremonial ado. A dead snake is not looked upon, and the skin shed by the snake is not touched.

Names of reptiles.

nā'āshói is sometimes used to designate any creeping animal, but refers more properly to the lizzards.

tłish dinǎ'ě, the snake people.

tłish, a snake.

dīyósh, a noiseless snake, the bull snake (garter).

tłish do ńtł'í', the track snake (a long, green and speckled snake).

chézhí' tłish, the malpais snake.

tłish ǎńfnigi, the sounding snake, the rattlesnake.

tłish (do) nǎt'ági, the flying snake.

tłishká, the arrow snake.

tłish adilqáshigi, the snapping snake.

tłish dilqíl, the black snake.

tłish dotł'ish, the blue snake.

tłish łitsó, the yellow snake.

tłish łagal, the white snake.

tłish disós, the silvery snake.

tłistso, the horned snake (copperhead).

bichói (tłish bichó'i), the grandmother snake.

tqótłish, the water-snake.

LIZZARDS

The lizzard, specifically the Gila monster, is the god or medium of divination by sensation in some rites, as in the wind chant.

na'āshói dikhízhí, the horned toad.

nashúilbai, the gray lizzard.

nashúilbai dilawhóigi, the fleet lizzard.

nashói dotlísh, the blue lizzard.

nashúilgai, the white lizzard.

nashói nālnódi, the large, green lizzard.

naāshúi qá'ichídi, the lizzard which scratches out.

tsékinaāzólí, which makes a noise on the rocks, rock lizzard.

tsékinaāzólí labá'i, the gray rock lizzard.

nahadlú, a small lizzard (?).

tqínlaí (ice layers [?]), the Gila monster.

WATER ANIMALS

Water animals are sacred and figure in many rites. The skin of the beaver and otter were used in making highly prized headbands, while the fur of beaver and muskrat still decorates some rattles. It is said that these animals were quite plentiful on the banks of the rivers, and the skins were often bartered from neighboring Indians.

tqáltlá naldéhi, the water animals.

tqábâstqín (tqábâastqín, probably from tqábâ, the shore and setqí, it lies), the otter.

tsōstqíni (litso setqíni), the yellow otter (?).

chā, the beaver.

tqábâ' má'i, the muskrat.

lō', the fish; lōtso, a large fish.

lō' bowhó qā'āigi, with teeth turned downward (extinct).

The following fish are probably mythical.

lō dilqíí, the dark fish; lō litsó, the yellow fish; lō lagaf, the white fish; lō bakhá' and bā'ād, the male and female fish.

châl, the frog; châl dikhíshi, or châltsó, the toad.

châł nnézi, the green frog; châł yázhe, the small frog.

tsilaghá', the water-dog: tsilaghá' bokhósdó hănölzhěi, with the fringed neck; khătšín, (woody skin), similar to a water-dog. tqăłkhădijădi, water-bugs.

tsô'săni, tadpole, which are lizhfni and lichfgi, black and red, also tsô'săni bitsă' hulóni, basket shaped tadpole, and tsô'săni aqfnlăigi, which fold.

chădaghăhi, which is tired, the turtle.

tsistqěl, the tortoise.

yôchôshi, a turtle valued for beads made from its shell.

The shells of turtles are used as medicine cups.

NAMES OF BIRDS

Birds in general are called nătăgi (nahătăgi), which fly. Apparently birds are not classified in distinct groups, with the exception perhaps of the eagle, with which the hawks are usually identified. Many birds derive their name from some physical distinction, such as color, in many instances also from their call, as the transliteration will show.

Quite a number of birds are sacred and anthropomorphic, and consequently have a prayerstick and sacred name assigned to them. Chief among these are the atsă dină'ě, eagle people, who inhabit the yăghahokă', or heavens above, depositing their plumage and walking about there in the form of beautiful youths (dzilkhă). The Navaho do not kill eagles and hawks allied to them. These are caught at times but released after the desired feathers have been plucked. No hesitancy is felt in using the feathers of a dead hawk or eagle for the arrow shaft and other than ceremonial purposes.

An offense against the eagle, or any illness which is felt to be due to their influence, must be remedied through the bead chant (yôæ hatqăl), known also as the eagle chant. The eagle people are said to have taught this chant to one dufnikfhi, who is therefor its author here. The sand painting commemorating his

assumption by eagles into the celestial regions is one of the distinctive features of the bead chant.

THE EAGLE.—

atsá, (it clinches its food), the eagle.

atságai, the white eagle; atsázhīn, the black eagle; atsálba'i, the gray eagle.

dāltso (dāltsoi), the yellow beak, or t'ájiltsoi, yellow beak.

(atsá) t'ájilgai, the white back eagle.

atséltso, or atséltsoi, the yellow tail, the red-tailed hawk (*Buteo borealis*).

gīnī, which calls gī, gī, a hawk (applied also to Cooper's hawk). This is also called gīnīlbaī, the gray hawk.

gīnitso, a larger size of this hawk.

gīnitso dotlīsh, the big blue hawk.

gīnitso dilqīl, the dark hawk.

chīltqāt'āgi, which flies among the weeds, the marsh hawk.

tsīyālzháhi, which hunts below the trees, the bird hawk.

tsīyālzháhi tso, the large bird hawk.

tsīyālzháhi biná hichfigi, the red-eyed bird hawk.

dzīli, which cries dzīl, dzīl, the sparrow hawk.

THE OWL.—The owl is sought for its feathers and many do not hesitate in killing them. The owl is mentioned frequently in the role of a spy, and is sacred.

nāēshjā, the horned-owl; nāēshjā hastqīn and nāēshjā esdzān, the Owl Man and Owl Woman.

nāēshjā bā'nā'ái, which sit side by side, the American hawk-owl.

dlūtqā' nāēshjā, owl amongst prairie dogs, the burrowing owl.

nāēshjā khāli, the owl which makes the noise, khāl, khāl.

nākē'nf, an owl.

tsīdīldói (tsīdīldóni, or tsīndīldóhi, from its noise, dô, dô), the small screech-owl. Of these there are also tsīdīldói łagai, dotlīsh, litso and dilqīl, the white, blue, yellow and dark screech-owl, respectively.

THE CROW, AND OTHERS.—Crow feathers are sought for the arrow shaft and for use in ceremony. The buzzard is not molested, and both are sacred.

jěshó, the turkey buzzard; gágě, the crow.

tqázhi, the turkey.

nádzedlłózi, the road-runner.

daldáni, the quail.

â'á'í, the magpie. The turkey, road-runner, quail and magpie are patrons of dest'í, star reading. dest'í binátqo, eyewater for star reading, consists of a mixture of the eyewater of these four birds. tqázhi bæězhó, the turkey's tassel, the feathers of which are used in making sacrificial cigarettes (ket'án). tqázhi bit'á', turkey feathers, and tqázhi bitsé, the turkey tail feathers, are also used ceremonially. tqázhi bikhé, the turkey's track or footprints. tqázhi ilkhéi, like the turkey's track, designates the thongs or claws on the pole of the hoop and pole game.

SMALLER BIRDS.—

ayázh, or ayázh altqás'aí, various small birds, is a general name for the smaller varicolored birds which have no special name. They are said to have been produced from the feathers of the monstrous eagle, tsénahalé'. Their feathers, and those of the blue and yellow bird are added to the ket'án, prayersticks, to the masks, and otherwise.

dóli, the bluebird.

tsfdiltsöi, the yellow warbler.

ayáshilchí is said to signify the red back. It should probably be derived from ayásh ilchí, the small redbirds, which is also true of the following kinds: ayásh dilqil, the small, dark birds; ayásil-tsoi, the small, yellow birds; ayáshilkhízh, the small, spotted birds,

WINTER BIRDS.—The following group was dressed for winter at the creation, and also figures ceremonially.

chíshisháshi (from its call, chīsh, chīsh shqā), a small, crested bird.

chfshibézhí, (from its call, chīshi, chīshi, bē bē), the chickadee.
dīl'tóshi, the titmouse (snow-bird).

tsīnłkháhi, (from the noise, khál, khál, produced in picking), the sapsucker.

tsīnłkháhi tso, the woodpecker.

nłkē'nf, similar to an owl.

WATERFOWLS.—The greater number of waterfowls and shore birds are sacred. The Navaho do not eat them, with the exception of the turtledove.

dēł dinæ'ě, the crane people.

dēł, or dēhi, the sandhill crane.

tqáłtlá'halé', the blue heron.

tqáłtlá'halé' łagaigi, the white heron.

tqójińdīgai (tqokńdīgai), the snowy egret.

tqójińolná' (it crawls in the water), the roundbill crane.

dākł, twig bill (white breasted, gray backed), crane.

yáhazhjól, crop or ball neck crane (the swan [?]).

qőz, a crane.

tqábâsdīsi, (which bores into the shore), the snipe; tqábâsdīsi altsīsi, the small snipe; tqábâsdīsilbał, the gray snipe. Their call is bss, bss.

nāl'éhi, (which floats), the duck; nāl'éhi dīłqłhigi, the dark or black duck; nāl'éhi dotłfzhigi, the blue duck; nāl'éhi łitsóigi, the yellow duck; nāl'éłitso, the mallard; nāl'éhi do-nał'ági (dōnát'áhi), the non-flying duck, the goose; nāl'éhi dōnát'ági dīłqłł, dotłfsh and łagaigi, the dark, blue and white wild geese.

hasbđi, (from its cry, bid, bid), the mourning dove; hasbđitso, the large, and hasbđi altsīsigi, the small, wild dove; hasbđiłgai, the pigeon.

tqáshjízhi dinæ'ě, the swallow people.

tqashjízhi, the swallow; tqashjízhi ndilkísi, (from its cry, kīs, kīs), the cliff swallow; tqashjízhiłbai, the gray swallow.

dóliłchi, the redbreasted bluebird found near streams.

ADDITIONAL SACRED BIRDS.—

jā abāni, the bat; jā nltšli, the crystal ear bat.

bízhí, the bull-bat or night hawk.

jōzhgháli (chōzhgháli), a large, yellow bird.

dā'tqōīnogháli, which shakes the dew, the marsh wren (?).

dahitqfhi (dahitqf), the hummingbird.

OTHER BIRDS.—

tsidilbáhi, a gray bird; tsidiltsoi líkhízhigi, the speckled yellow bird.

jäg't'ōdi (jak't'odi), from its cry, jäg'f, jäg'f, t'ōd, t'ōd, the titmouse.

chíshi kíneshbízhí, (resembling corn dumplings), a small bird.

debén'i', (from its call, shbshăö, shbshăö), Say's phoebe.

tsishgaf, white head, the nuthatch.

năēzhīn, the black-breasted woodpecker.

neshchí biyá', pine louse, a small sap-sucker.

t'áyārchí, red breast, the yellow-hammer.

zāhaláni (zād lāni, many words), the mocking-bird.

tsīya'wózhi, prickly head, the meadow-lark.

chīshgáhi, the western robin.

yáhalzhīn, a black spot on its neck, applied also to the sparrow.

kai bīsi, (which calls bīs, bīs), the willow-bird.

hoshdōdi, (which calls, wūwū, wiúw, wūwū, wiúw), the whip-poor-will.

jīnf'í, (its call, jī, jī), gray bird with red-spotted neck and head.

tsídi chílnfhi, the bird which announces the snow (gray with white wings).

chōzhzhégi (jōzhzhégi), from its cry of zhă, zhă (?).

chōshlt'áhalzhīn, black calf of the leg (?).

năkă ná'ijīni, black eyebrows.

ayátsī dishkáni, whose side hair project.

tsil hazési, (burnt tail [?]), yellow, reddish tail.

jădidlú'i (jadishdlú'i), snow-bird, seen in flocks in winter, but scattered in summer.

tsenáolchóshi, the cañon wren.

tsenáolchóshilchí, the rock wren.

chági, (from its call, chäg, chäg), the blackbird.

chágitso, the large (yellow winged), blackbird.

chágilbai, a small, gray blackbird.

BLUEBIRDS.—

tsán lání, many tsan, also called qash'ai (from its cry, á'i, á'i), the chapparal jay or piñonero.

tsändilzhéi, (its cry, zhí, zhí), which is also called tsändistqísi, the tsán with the shins, the small bluejay.

jógi, (from its cry, jōg, jōg), the bluejay.

doli (dól, dól), the bluebird.

MODERN.—

nahóqai (naqóqai), the chicken. The Navaho do not raise chickens, nor do they, as a rule, eat eggs.

nahóqai baghán, a chicken
pen.

nahóqai bakhá, a rooster.

nahóqai bá'ád, a hen.

nahóqai biyézhí, an egg.

nahóqai biyázhi, chicks.

Words referring to the anatomy of the bird.

The words used in designating the various parts of the bird's anatomy are practically identical with those used for the human body. The bird, however, has no face (bínf), no teeth (bowhó), and nose (bichf'), and chin (biyátsín).

tsídi, a bird.

tsídi biná, the bird's eye.

biná tqél, broad eyes (like the owl).

tsídi bidá', a bird's bill or beak.

bidá yáshish, a curved or hook bill (such as the eagle's or hawk's).

tsídi bizé, the bird's mouth.

bizé hótśá, large mouth (such as that of the bull-bat and whip-poor-will).

bitśó, its tongue.

bijéyí', its ear.

The bat (jáábáni) has bijá, ear lobes and bowhó', teeth, but no legs.

bokhós, its neck.
 bitá', its wing feathers.
 bitsós, the small and down
 feathers.
 bitá' ya'tá, the crest.
 bitá' ástśín, the wing.
 bitsé, its tail and tail feath-
 ers.
 bitsītsín, its skull and head.
 bëeyá, the back of its head.
 bitsí, its hair.
 bijád, its leg.
 bijástqīs, its shin.
 bakhági, its skin.

Words referring to birds.

Birds are not endowed with the faculty of speech excepting in their mythical character. The zāhalāni, mocking-bird, alone is said to speak (yáltqi). Neither do they sing, properly speaking (hatqál, he sings, being used of humans). Their song, cry or call is universally expressed by

tsídi aní (adaní), the bird
 says or sounds.
 natá', or yitá', it flies.
 yaatá', or naatá', it flies or
 scoops down (like an eagle).
 alkéyikha, or nanákha, it
 flies in a circle.
 tsínshtqāzh, it picks the
 wood, like the woodpecker.
 tsídi bitó', any kind of
 bird's nest.

The eggs of birds are not eaten. Some birds, as the turkey, the bluebird, the yellow warbler, the mourning dove, and some snow-birds, are occasionally eaten.

tsídi bílǎ', the bird's fingers,
 (its toes).
 biláshgān, its claws.
 biláshgān næs, long claws
 (such as the hawk's).
 bibíd, its stomach.
 bitsá, its ribs.
 bitsá', its abdomen.
 bichí, its entrails.
 bizíd, its liver.
 átl'ish, the gall.
 bijéi, its lungs and heart.
 bijáshkāshi, its gizzard.

gíni bitó', a hawk's nest,
 and so on.
 tsídi bikhé, a bird's track.
 tsídi, or gá' deildél, they eat
 birds or rabbits (such as owls,
 hawks, etc.)
 chōsh deildél, worm-eating
 birds.
 tsídi biyézhí, bird eggs.
 tsídi biyázhi, or biyázhi,
 young birds.

tsídi bildédél, (bildishdél, I catch), I caught a bird in my hand.

tsídi yínishlé, I ensnare a bird.

tsídi bewödléhi, a birdsnare.

tsídi bitá' hanshtqá, I hunt bird feathers.

Birds are varicolored, some being likhízhí, speckled; dīnlzhín, black mixed with red (or black spots); dīnlbá', brown spots; dīnlgaf, white spotted; dīnlchí, with a tinge of red; dīniltso, with a tinge of yellow; and dīnöltlísh, a tinge of blue.

NAMES OF INSECTS.

Insects are divided into two general groups, chōsh ndātáhi, flying insects, and chōsh biyázhi ndajéigi, the small insects, which walk. The former group may be subdivided into dādishíshi, which sting, as the bee and the wasp, and bidá' yēdaastós idat'é, which suck out with their lip, as the mosquito. The other group also includes mere worms, or bijád daádin, which have no legs.

BEETLES (*Coleoptera*).—

kīnædlíshi (ginidlíshi), the stink-bug. Of these there are also kīnædlíshi tso, the large stink-bug, and kīnædlíshi altsísigi, or yázhe, the small one, and kīnædlíshi bitsē hulónigi, the one with a tail.

má'ichán, coyote dung, the scarabee; má'ichá altsísi, the small scarabee; má'ichá bijád bídadsigáigi, the beetle with white legs.

tqálchā, or chélchā (litsóigi, yellow), June-bug; chélchā nodózigi, the striped beetle; tqálchā altsísigi, the small beetle; chélchā dilqíligi, the dark beetle.

nłtsá'gō' (the rain splash, from the noise it produces in alighting), the wood-beetle; also nłtsá'gō' lizhínigi, the black, nłtsá'gō' altsísigi, the small, and nłtsá'gō' adáłtsísi daalzíní, the very small, black wood-beetles.

chāneilqízi, a scarabee (found in corrals); ndá', or dóní chāneilqízi, the humming (brown) scarabee; chāneilqízi altsísigi,

the small scarabee; tseyo'áhi, or tsene'áhi (habáigi, gray), the stone carrier, scarabee, also tseyo'áhi lizhfnigi, the black one.

tqēl tsitsoi, the pinching-bug.

wódæ etsáhi, the snapping wō', pinching bug; wodæ etsáhi dilqil, the dark pinching beetle. wō' is said to be the noise produced by walking on the ground, and occurs frequently in the names of insects.

wo'ntfisi, the hard wo.

wōnalchīli, the small beetle (minnow [?]).

wōnalchīli litsōigi, the small yellow beetle.

wōshīyīshi, the hooked beetle (curved back).

tqo bichōsh, the water beetle.

tqo bichōsh likhízhigi, the spotted water beetle.

chīl dilyísi bichōsh, the scare-weed beetle; chīl dilyísi bichōsh lichfigi and habáigi, the red and gray scare-weed beetles.

ndiyíli bichōsh, the sunflower beetle; ndiyíli nchíni bichōsh, the beetle of this species of sunflower.

iltfhi bichōsh, the rubber-plant beetle.

wā' bichōsh, the bee-weed beetle.

tléshi likhízhí, the spotted horsefly.

jēhigháhi ntsásigi, the large beetle which enters the ear; also other species, as jēhigháhi lichfigi, dotlízhigi, lizhfnigi, the red, blue and black beetle, and jēhigháhi naat'áigi litsōigi, the yellow one which flies in a circle.

neshchí biyá, the pine louse, pine weevil.

tsīnayái (tsīn iyâ'), which eats wood, the wood-borer (?).

tsīn dotlízhigi, the blue borer, and tsīn lagáigi, the white one (similar to an ant).

nahachídi, which scratches with its feet (?).

wō' daalchfhi, the squash-bug.

GRASSHOPPERS, LOCUSTS, ETC. (*Orthoptera*, fan-winged).—

wóneshchīndi, (which makes the shrill noise of chī), the locust.

wóneshchīndi tso, the big locust; wóneshchīndilgai, the white locust; wóneshchīndi biná lichfigi, the locust with red eyes;

wóneshchīndi biná dotlízhigi, with blue eyes; wóneshchīndi bijékhāli, the deaf locust, which is also called wóneshchīndi altsīli, from the sound, tsīl, tsīl, which it causes by boring into the wood.

nahāchāgi, which hops, the grasshopper; nahāchāgi tso and yāzhi, large and small; nahachāgi dilqīli, dark; dotlíshi, blue; nahachāgi hashtlíshi, the mud-colored grasshopper; nahachāgi it'ési, the sizzling or midsummer grasshopper; nahachāgi it'és-ichí and it'ési dotlízhi, the red and blue of this kind.

nahakíse, the cricket.

WASPS AND BEES (*Hymenoptera*, *four-winged*).—

wóna'altqéhi, which picks up, sand-wasp; wóna'altqéhi dotlízhigi, the blue sand-wasp; wóna'altqéhi lichfigi, labáigi, lizhínigi, litsóigi, red, gray, black and yellow sand-wasps.

tsis'ná'tso, the bumble-bee.

tsis'ná'ltsoi, the yellow wasp; tsis'ná'ltsoi numázigi, the round wasp; likhízhigi, speckled; tsis'ná'lbáhi, the gray wasp.

tsis'ná' yázhe, the honey-bee; tsis'ná' lizhínigi, black wasp; tsis'ná' bijād nnæsigi, the long-legged wasp.

FLIES (*Diptera*, *two-winged*).—

dó'tso, a large fly.

tseédói, the housefly; tseédói yāzhi, the small fly; tseédói adilqáshigi, the biting fly; tseédóitso, the large fly (housefly).

tl'ézhi (dl'ézhi), the horse- or cowfly; tl'ézhitso, the larger one; tl'ézhīlbaí, the gray horsefly; tl'ézhi yazhi, the small one.

lí bitsís'ná', the horse bee (which lays its eggs below the hide of a horse).

tsíi tso, a small horsefly.

bitsé nnézi, the long tail, robber-fly.

tsí'i, the gnat.

tsīdānāzi, long-lipped gnat, the mosquito.

tsīyáni, meat eating gnats or flies.

ānl'tāni (?), the sacred bug of the Navaho. A small bug with

green spots on its wings and abdomen. Usually found in corn-fields.

anł'ānitso (nł'ānitso), the harvest bug (?).

wó'nālchídi, which skips, the skipper-bug.

BUTTERFLY AND MOTH (*Lepidoptera*).—

kālúgi, a butterfly; kālúgilgai, white butterfly; kālúgitso, yellow butterfly.

kālúgi tso, large butterfly, which is varicolored, such as kālúgitso lichf, the large, red butterfly, etc.

kālúgi yázhi lizhíni, the small, black butterfly. The small butterfly is also lichf, red; lagáigi, white; litsóigi, yellow.

ícháhi (íchái), the moth (ishchá, it falls into the fire).

ícháitso, the large, and ícháhi yázhe, the small moth.

DRAGON-FLIES (*Neuroptera*).—

tqānī'af, which is spread out on the water, dragon-fly.

tqānī'af dotfízhí, the blue dragon-fly.

tqānī'af yazhe (dotfízhigi, blue), the small dragon-fly. Other small dragon-flies are litsóigi, yellow; labáigi, gray; nilqínigi, greasy; lichfigi, red; lagáigi, white; lizhínigi, black.

jād neizhódi (jānishódi), which drags its feet, and also jād neishódi tso, and jād neishódi yázhi, the large and small one.

chōsh nodōzigi, speckled bug (?).

chōsh lizhín adilqáshigi, the black biting bug.

WINGLESS INSECTS (*Aptera*).—

nāāshjēi (nashjēi), the spider.

nashjēitso, the large spider (also used to designate the tarantula).

nashjēitso labáigi, the large, gray spider.

nashjēi yázhe, the small spider.

nashjēi nahacháigi, a small, jumping spider.

nāf'áshi, the spider which plods along, the tarantula.

nāf'áshi tso, the large tarantula.

nāāshjēi tsīzīsi, the head basket spider. The abdomen suggests the carrying basket. The domestic spider.

nashjēi tsīzīsi bijānēzi, (long legs), daddy long legs.

nashjēi tsīzīsi labāigi, the gray spider, and nashjēi tsīzīsi bināgha hichfigi, the spider with the red back.

lēezōli, the spider which blows the dust.

naazōzi, the small, red sand spider which stings badly.

saigō', the scorpion.

jād lāni (jālāni), many feet, the centipede.

wō dīlnfhi, which feels its way (before walking).

ANTS.—

wolachf, the red ant; wolachf dilqf, the dark-red ant.

wolachf yāzhe, the small ant.

wolachfītsoi, the yellowish-red ant.

wolazhīni (wolāzhīn), the black ant; wolazhīni tso, the large ant; wolazhīniłtsōi, the yellow-black ant.

wolazhīni bijē jilchfigi, with a red front; wolazhīni nā'łtsā'āgi, the listening ant (which turns its head toward any noise), and wolazhīni nłchūnigi, the stinking ant.

LICE.—

yā', a louse; yā'ashchf, red louse; yāzhīn, black louse; yālgaf, white louse; yā'łbał, gray louse; yā'stśli, from tsīl, the noise made in smashing them.

dinė' biyā', lice found on the person.

lī biyā', horse lice; lī biyālgai, white, and lī biya'stśli the large horse louse.

āyā', the tick; debé biyā', sheep lice; yā' dotl'fzhi, blue sheep louse; debé biyā'stśli, the large sheep louse.

Similarly, łechāi, dlū, gā', jādi biyā', lice of the dog, prairie dog, rabbit and antelope.

bī' biyā' dotl'fzhi, the deer louse.

nahōqai biyā', the mite on chickens.

wōsitśli, the bedbug.

tsedái, the rim-louse (similar to a bedbug).

tl'ò' nadá biyá', the cinch-bug.

WORMS AND GRUBS.—

chösh, the maggot.

wósækidi, the tobacco worm (these are varicolored, speckled, gray and black).

wósætsini, the grub.

wósizini, the "standing bug" (?).

nadá bichösh, the cut worm.

nadá bichösh altsisigi, the small corn worm.

chösh bokhöi, the fire-bug; chösh dotl'izhi, the blue worm.

chösh yideltqóhi, the smooth worm.

chösh ditl'ói, the hairy worm.

tsékiyahi'áhi, a small, brown, horned worm (grub or pupa [?]).

Words referring to insects and their anatomy.

bíhodzándi ádin, a mere passage, applied to the stomach and intestines of reptiles, fish and insects.

chösh bitá', the wings of an insect; bitsitsín, its head; bakhági, its skin; biná, its eyes; bowhó, its teeth; bijád, its legs or feet; bijé, its forepart; biláshgān, its claws (of beetles); bílá', its mandibles, or toes.

bizóz, its sting; bizóz dahulóni, such as have a sting.

dadishfsh, they sting.

bítságāl (bitsé aghál), the rattle of a snake.

wóneshchīndi bakhági, the locust's shell.

biyázhi, the pupa of most insects.

wolázhn, ants, have both biyázhe, pupa, and biyézhi, eggs.

naashjéi biyázhe bizís, spider egg bag; naashjéi biyézhi, spider eggs; nashjéi bitl'ól, cobweb; naashjéi ndistf', fan or web enclosure.

nāl'áshi baghāndi, the tarantula's nest.

chösh yi'ná, worms and bugs creep; chösh natá', or yitá', some fly.

wolachī ilaghūl (yīlaghūl), ants and similar insects, bedbugs, lice, etc., run.

nashjēi ilaghūl, the spider runs.

nāl'āshi yigāl, the tarantula walks.

tsf'ī' sītšōs, a gnat bit me; tseédó'i ájjishishqāsh, a fly bit me.

wónaltqēi shfshish, a wasp stung me.

bildédēl, I caught a fly or insect.

Lice infest both the body and head, and are probably due to the utter disregard of cleanliness. They are removed in a very matter of fact way by submitting the clothes to a careful scrutiny, or searching the hair for them. The latter is especially done by the mother, and is very common with the female members of a family, who exchange the courtesy. Spasmodically, too, a more energetic campaign against these parasites is carried on by some exasperated individual, as the following words and expressions would suggest. The results obtained are very good indeed, but rarely permanent.

yā shfidilaghūd, I feel lice creeping over the body or head.

adishchfd, or yā ishchfd, I am scratching myself (owing to lice).

yā shiniqf, I am lousy.

yā shfshqāsh, I am bitten by lice.

yā qādish'f, I am searching for lice.

yā ndishtqē, I am catching lice (yā ndiltqf, I caught lice).

yā akf'idishgā, I kill the lice; yā sēlqf', I killed a louse.

yā sēltqāl, I smashed a louse.

yā dasēltqīn, I froze the lice (by exposing my clothes at night).

yā'ishbézh, I boil the lice, that is, my clothes.

shiyā ādin, or yā sha'ādin, I am rid of lice.

In earlier days lice were exterminated by means of an instrument called yā bēgā, the louse killer. This was made of a hard wood, tsftfz (*Findlera rupicola*), and required five smoothly polished thin sticks, one edge of which was beveled and slightly sharpened, with their tips tapering to a point. Near the upper

end each stick was punctured with two holes through which a cord was laced, and the ends crossed in the rear, so that in operating the sticks overlap and close snugly, as with a fan. A loop at the lower end of the sticks was provided to receive the hand and hold the instrument in position. In operating it the points were passed under the hair, hard to the skin, and by pressing the lower ends of the sticks and drawing the two strings together, the teeth or beveled edges were brought into contact and crushed any vermin falling between them. The louse killer is no longer in use, but is made only at a certain ceremony for dispelling filthiness. *yă hastqfn*, the Louse Man, designates a monster, in other words, the louse, or filthiness personified.

SACRED NAMES OF ANIMALS

Navaho zoöiatry includes practically the entire native fauna, which accordingly enters largely into ritual and worship by the use of skins, feathers, claws, tissues, and the like. Then, too, the figures of many animals appear in the sand drawings, as that of the eagle, the deer, the antelope, prairie dog, turkey, and others. Still, the most general method of animal worship consists of a sacrifice in the shape of a prayerstick, the colors of which correspond with those of the animal, and which subsequently is deposited near its habitat. The stick is therefor "dressed" for the animal, that is to say, it is colored and decorated with plumes, fed with tobacco, which is symbolically lighted, and then placed into the hands of the patient or, if there be many prayersticks, they are lined in their order of precedence in the ceremonial basket. The singer then proceeds to dedicate them by song and prayer, in the course of which he invokes the divinity by its own sacred name. A list of these names is herewith presented, with such translations as were available, though frequently their meaning becomes clear only through a detailed legendary account.

The names of the male and female usually correspond, excepting that *jikhæ nat'āni*, maiden and chief, is substituted for

dzilkhæ nat'āni, youth and chief. The list represents only names of animals for which a prayerstick is dressed, while some birds, as the whip-poor-will, mocking-bird, Say's phoebe, and insects, as the gnat, weevil, etc., are not recognized by ritual.

BIRDS.—

The crow (gāgi), n'lehi' dilqili nābiyoltqéli dzilkhæ nat'āni, turned on his side by the dark wind, fine young chief; or, tqālchā nādlehe dzilkhæ nat'āni, which name is said to originate with the b'nl'tāni, the deer grower, who used the crow as a spy for his victims of witchcraft.

The buzzard (jīshō), dzilkhā dokāli dzilkhæ nat'āni; or, simply, dzilkhæ dokāli, the fine young chief who sways in his flight above the mountain.

The eagles (atsá naghái).

The eagle (atsá), dāltsoi dzilkhæ nat'āni, yellow beak, youth and chief; dāltsoi jikhæ nat'āni, yellow beak, maiden and chief.

The others are invoked in a similar manner:

The black eagle, atsázhin dzilkhæ nat'āni.

The spotted eagle, sāg dzilkhæ nat'āni.

The white eagle, atságai dzilkhæ nat'āni.

The gray eagle, atsálbai dzilkhæ nat'āni.

The marsh hawk, atséltsoi dzilkhæ and jikhæ nat'āni.

The uglier eagles, atsá danchóigi:

The black hawk, gínitso dilqil dzilkhæ nat'āni.

The blue hawk, gínitso dotlísh dzilkhæ nat'āni.

The gray hawk, gínlbai dzilkhæ nat'āni.

The sparrow-hawk, dzíli dzilkhæ nat'āni.

The white back eagle, t'ájilgai dzilkhæ nat'āni.

The turkey (tqázhi), dzilkhæ dsot'hi dzilkhæ nat'āni, the fleet youth and chief.

The owl (nāshjā), hayolkháigi biy' neyāni dzilkhæ nat'āni, the youth and chief raised within the dawn; or another name:

tsīn alní qináha dzilkhæ natāni, living in the middle of the woods, the youth and chief.

The screech owl (tsīdīldōni), comes in for four names, both in the feather (atsōsiji) and in the night chant (tlēji): hayolkhāl biyāzh dzilkhæ natāni, the little one of the dawn, youth and chief; nāhodætłīsh biyāzh dzilkhæ natāni, child of the celestial blue, etc.; nāhotsoi biyāzh dzilkhæ natāni, child of the sunset yellow, etc.; chahalqēl biyāzh dzilkhæ natāni, child of the darkness, etc. In the night chant the invocations are identical excepting that biyāzhi, offspring, child, is substituted for biyāzh, thus: hayolkhāl biyāzhi dzilkhæ natāni, child of the dawn, youth and chief, etc.

The snipe (tqábāsdīsi), tqábādsōtłīhi dzilkhæ natāni, running at the edge of the water, youth and chief.

The twigbill crane, tākī dzilkhæ natāni.

The blue heron, tqāłtlāqaālē' dzilkhæ natāni.

The snowy egret, tqójindīgai dzilkhæ natāni.

The roundbill crane, tqójinołnā' dzilkhæ natāni.

The ball neck (swan [?]), yāhashjōl dzilkhæ natāni.

The crane, qōz dzilkhæ natāni.

The duck, nāl'ēhi dzilkhæ natāni.

The teal (?), nāl'ēhīłbai dzilkhæ natāni.

The goose (wild), do natāgi dzilkhæ natāni.

The mud-hen, tqúidozōsi dzilkhæ natāni, drawing a line of water after it.

The woodpecker, tsīłkhāli dzilkhæ natāni.

The meadow-lark, tsīyawúzhī dzilkhæ natāni.

The quail, dałdāni dzilkhæ natāni.

The small birds, ayástōsi dzilkhæ natāni, feathers of which are largely in use for decorating the masks, prayersticks, rattles, etc. Others of this description are:

A very small bird, ayá shilchī dzilkhæ natāni.

A blue-crested bird with large bill, ayásh dotłīsh dzilkhæ natāni.

A bird similar to an owl, *níke'ní*, or *nakění*, and active at night, is invoked as *tsendesbági bidá dotlísh (nakení) dzilkhæ natáni*, he of the curved gray rock and the blue lip (bill), the youth and chief.

Another night-bird is invoked as *nakhidolaghúshi dzilkhæ natáni*, the youth and chief who calls twice.

The bull-bat (*bīzhī*), *yaťá' hoghángi kós díłqíl behoghándi kós díłqíl yí' neyáni dzilkhæ natáni*, at the celestial home in the house of dark clouds where he was reared, the fine young chief.

The bat (*jaábáni*), *tsétqáhatsogi ja nłtsíli esdzá niyél íshla nádihíłá*, Bat Woman of the mouth of the big cañon, I have made a sacrifice to you, your smoke (cigarette) is ready. (For a male patient Bat Man is substituted for Bat Woman.)

INSECTS.—

The grub (*wósatsšini*), *níyí hazlí dzilkhæ natáni do qinán dzilkhæ natáni*, created in the earth, thou youthful chief, and living youth and chief.

The grasshopper (*nahachági*), *níkehíł'ásh dzilkhæ natáni (?)*.

The caterpillar, *níhatsós dzilkhæ natáni*.

Small beetle, *wónalchíli dzilkhæ natáni*.

The centipede, *jā łáni dzilkhæ natáni*.

The scorpion, *saígō dzilkhæ natáni*. Another similar to scorpion, *tsildíłqáshi dzilkhæ natáni*.

The spider, *nashjéitso dzilkhæ natáni*.

ANIMALS OF THE LAND.—

The bear (*shāsh*), *dzilyí neyáni dzilkhæ natáni*, reared in the mountains; or, *dzilyí nnádahi dzilkhæ natáni*, roaming in the mountains, etc.; or, *tsín yí' nnádahi dzilkhæ natáni*, roaming in the woods, the fine young chief.

The porcupine (*dasáni*), *chídá náskídgi dzilghá nadáha dzilkhæ natáni*, the fine young chief who penetrates the mountain at the hill of the thorn-bush (the male); *chídā náskídgi tsəghá nadáha jikhæ natáni*, the fine maiden chief who penetrates the rock at the thorn-bush hill (female).

The deer (bî'), tqonehelfgi nîhodasgai dziłkhæ nat'āni, the youth and chief of the white patch (?) at tqónehelî (a sacred spring).

The antelope (jádi), tqonehelfgi nîhodastso jikhæ nat'āni, the fair maiden chief of the yellow patch (?) at tqónehelî.

The big-horn (tsetqādebé); tqonehelfgi kídahuidzógi nîhodash-jíni dziłkhæ nat'āni, the fair young chief of tqónehelî, at the black spot in kida huidzóhi (a peak in the Black Mountains).

The female big-horn, tqónehelfgi kídahuidzógi nîhodashtlízhi jikhæ nat'āni, the fair young maiden chief of tqónehelî, at the blue spot of kídahuidzóhi.

The wolf (mâ'itso), natléitso dziłkhæ nat'āni.

The mountain lion, nishdúitso dziłkhæ nat'āni.

The wildcat, nishdúilbai dziłkhæ nat'āni.

The puma, nishdúilkhízh dziłkhæ nat'āni; also t'fo nshdúi dziłkhæ nat'āni, the meadow wildcat.

The badger, nahaschíd dziłkhæ nat'āni.

The skunk, wolízhitso dziłkhæ nat'āni.

The spotted skunk, wolízhiłkhízh dziłkhæ nat'āni.

The gopher, nítqát'ā' naghái nīyenáhidi'náhi (naazísi) dziłkhæ nat'āni, the fine young chief walking in the bowels of the earth and shaking the earth in his course (thou, o gopher!)

The coyote (mâ'i), qa'á biyáji khaitqá dilaghúshi dziłkhæ nat'āni, the fine young chief howling in the dawn beyond the east.

The dog (léchāi), khintqélgí dobídīnshdidáhi hashchéłtqi bíł dziłkhæ nat'āni, that fine young chief of the wide house, the inseparable companion and pet of the Talking God.

The yellow fox (mâ'iltsoi), bíłní'qodidezłi dziłkhæ nat'āni, the chief and youth created with the earth.

The kit-fox (mâ'i dotlízhi), bíłdááke ndahazłái dziłkhæ nat'āni, the youthful chief of the bordered fields (?).

The jackrabbit (gă'tso), hajīnai gă'tsogai dziłkhæ nat'āni, the chief and youth of the emergence (the white big rabbit).

The rabbit (ga'łbai), hajīnai ga' dziłkhæ nat'āni, the youthful chief rabbit of the emergence.

The prairie dog, *hajīnaŋ dlō dzilkhé natāni*, the youthful chief prairie dog of the emergence.

The rat, *hajīnaŋ lētso dzilkhé natāni*, the youthful chief rat of the emergence.

REPTILES.—

The rattler (*tłīsh ānfnigi*), *nī ałnī hogháŋgi*, *dlád dīlqīl behogháŋgi*, *dlád dīlqīl niyí neyáni dzilkhé natāni*, the youthful chief reared in the earth with dark moss (duck-weed [?]), at the house in the center of the earth, the house made of dark moss.

The females differ slightly: *nī ałnī hogháŋgi*, *dlád lāgai behogháŋgi*, *dlád lāgai niyí neyáni*, *jikhé natāni*, the maiden chief reared in the earth with white moss, at the house in the center of the earth, the house made of white moss.

The bull snake (*diyōsh*), *nī ałnī hogháŋgi*, *dlád łitso behogháŋgi*, *dlád łitso niyí neyáni*, *bitsís tqādīdīni*, *dzilkhé natāni*, the youthful chief, whose body is of pollen, and who was reared in the earth with yellow moss, at the house in the center of the earth, the house made of yellow moss.

The arrow snake, *tłīshká dzilkhé natāni*.

The water-snake, *tqótłīsh dzilkhé natāni*.

The track snake, *tłīsh dōnt'īhi dzilkhé natāni*.

The copperhead (?), *tłīstso dzilkhé natāni*.

The horned toad (*naashóí dicšíshi*), *nī ałnī hogháŋgi*, *dlád lāgai behogháŋgi*, *dlád lāgai niyí neyáni*, *dzilkhé natāni*, the youthful chief reared in the earth with white moss, at the house in the center of the earth, the house made of white moss.

The gray lizzard (*naashóilbai*), *nī ałnī hogháŋgi*, *dlád łitso behogháŋgi*, *dlád łitso niyí neyáni*, *dzilkhé natāni*, the youthful chief reared in the earth with yellow moss, at the house in the center of the earth, the house made of yellow moss.

The common lizzard (*naashóilbaŋ*), *nī ałnī hogháŋgi*, *dlád lāgai behogháŋgi*, etc., as for the horned toad.

The large lizzard, *nashóí nálnōdi*, *dzilkhé natāni*.

The rock lizzard, *tsékinaāzōli dzilkhé natāni*.

The green lizzard, *shainizefni dzilkhé nat'áni*, standing in the sun youthful chief.

The Gila monster, *tqínlai dzilkhé nat'áni*.

The tobacco worm (*wósækidi*), *sháitqá dzilkhé nat'áni*, the youthful chief (?).

WATER ANIMALS.—

The otter, *tqábástqīn dzilkhé nat'áni*.

The water lizzard (?), *nāhodlō dzilkhé nat'áni*.

The beaver, *chā dzilkhé nat'áni*.

The turtle, (tortoise), *tsístqēl dzilkhé nat'áni*.

The turtle, *chædagháí dzilkhé nat'áni*.

The dark fish (*lō dīqīl*), *tqātlānaldōi dzilkhé nat'áni*, the youthful chief slowly creeping in the waters.

The male fish (*lō bakhá*), *tqākhānaldōi dzilkhé nat'áni*, the youthful chief slowly creeping on the waters.

The toad (*chāl dīchīzhi*), *tqātlāhoghāngi dlād dīqīl biyneyáni tqabasdái dzilkhé nat'áni*, the youthful chief of the house in the water, he who was reared in the dark moss, and sits at the shore.

The green frog (*chāl nnézi*), *tqúidołkóli dzilkhé nat'áni jin*, they call him who draws the water after him youth and chief.

The skipper, *tqākhādijádi dzilkhé nat'áni jin*, and he that walks over the waters they call youth and chief.

The tadpole (*tsōsáni*), *tqādīqīl yenáhidī'náhi dzilkhé nat'áni*, the youthful chief who stirs the dark waters (male); *tqádotlīsh yenáhidī'náhi jikhé nat'áni*, the maiden chief who stirs the blue waters (female).

In addition some generic names are used for various groups, such as *nahoké' naldéi*, animals creeping on the ground, or reptiles; *dzilké' naldéi*, the animals of the mountains; *tqāthi' naldéi*, water animals.

Mythical animals, too, occur, such as *tqéholtsōdi*, the water ox; *tqēh*, the water horse; *lō diné daiyáni*, man-eating fishes, which are white, blue, yellow and dark.

Some chants and myths have special sacred names for a number of the animals already mentioned.

The coyote, *hayolkhál yitqádilaghūshi mā'i lagai*, the white coyote who howls in the dawn; *náhotsoi yitqádilaghūshi mā'i litso*, the yellow coyote who howls in the evening twilight; *náhodaetlīsh yitqádilaghūshi mā'i dotlīsh*, the blue coyote who howls in the sky-blue (of the south); *chahałqēł yitqádilaghūshi mā'i diłqīli*, the dark coyote howling in the darkness (of the north).

The otter (*tqábâhastqīn*), *tšenási*, sitting by the stone; *tsīnási*, sitting by the log; *khūnási*, sitting by the fire; *tqonási*, sitting by the water.

The porcupine, (male and female), *dzilbánatá dzilkhé natāni*, who carries the mountain.

The cat (*mósi*), *khe dolitsaída*, the noiseless foot.

The chipmunk (*hazaístsōsi*), *diyí yosíni*, versed in divine things.

The arrow snake (*tlīshká*), *nīqahonotsé*, the coil (?) with the colors of the earth.

The flying snake (*tlīsh natāgi*), *nihonodóz*, changing in the colors of the earth.

The snake (*tlīsh*), *bitsīs yenaghái*, who walks with his body (the male); *bitsīs yeoshōshi*, who crawls with her body (female).

The bull snake (*diyōsh bakhá*, male) *bitsīs ghaíyetī*, he with the transparent body; the female bull snake, *bitsīs tqadidín*, the pollen body. These names, however, are not complete.

The tadpole (*tsōsāni*), *nākēli*, who floats above, or *tqūinabēli*, who swims in the water.

The skipper-bug (*tqalkhádiijádi*), *dichíli yináhidī'nāhi*, the abalone moving from one side to the other.

The yellow fish (*lō litso*), *tqokēnaldói*, slowly creeping with the flow of water; the white fish (*lō lagai*) *tqókenálaghāli*, turning over and back in the water.

The nádle, or hermaphrodite, doing male and female work, is *dlād bi'adīli níkidoyísi*, drawn with water scum, and moving on the ground.

PLANT LIST

The flora of the Navaho country is rich and diversified so far as species as well as variety of color and form of plants and flowers are concerned, and the following list of plant names shows that the average Navaho possesses a fair knowledge of the flora of his native country. There are probably very few plants for which the Navaho have not distinct, well chosen names, and of whose physical and physiological properties they have not made some observations. This knowledge, however, is by no means general, which is true especially of the younger generation, who, owing to varied circumstances, do not pay particular attention to herbs, flowers, seeds and roots, as their forebears were wont to do. The older people, on the other hand, seem to be well versed in plant lore, and usually agree as to the name and properties of a plant, and its present or past use.

The physical and physiological properties often give the observing Indians a clue for the name of a plant. Thus they have plants with red roots, broad leaves, slender stocks, flowered or feathered tips, striped seeds; plants that grow on the shore, in the water, in the sand, or bind the border of adobe; plants that taste saline, bitter or sweet; plants that bloom at night; plants that have a pleasant or a disagreeable odor, or have the odor of spruce, buffalo, rat, sheep, etc.; plants that are big, slender, large or broad; plants that are rough, smooth, glittering, thorny; plants that have red, white, blue, yellow, or other colored flowers; plants whose leaves or fruit resemble owl's feet, snake's fangs, antelope's horns, etc.; plants that climb or creep; plants that serve, or are supposed to serve, as food for humming-birds, frogs, snakes, bees, and other animals, etc. A glance over the list will fully illustrate this.

By far most of the species are designated as "azē," medicine, and are known for their medicinal properties. It might be said,

in truth, that this is the keynote to the plant lore of the Navaho, since non-medicinal plants are designated as "t'öchil," or merely plants. On the other hand, their observations of the medicinal properties have in reality accounted for the discrimination of the various species of plants, and while many of their "medicines" are traditional only, tradition has preserved the name, although the object, and often the significance of the word, is obtained with difficulty.

Some of the medicinal plants are applied as remedies, while others, with few exceptions, are used ceremonially only, and since all their ceremonies are supposed to be curative, plants thus used are also designated as "azē," medicine, although they may not possess curative or medicinal properties.

In studying the plant lore of the Navaho, it will be found that the knowledge of plants and their properties is by no means the exclusive trust of the shamans or medicine men. True, their knowledge is quite extensive, especially so far as plants used ceremonially are concerned. Yet it is none the less true that ordinary laymen often exceed them in the knowledge of medicinal and phenogamous, or flowering herbs, although the knowledge of the latter may frequently be feigned in order to conceal their mortifying ignorance.

Studios care has been exercised in identifying the various species of plants. Indeed, it will be noticed that many have been merely recorded for want of proper identification. An endeavor has been made to transliterate accurately. This feature not only illustrates the working of the Indian mind as regards discrimination of species, but also furnishes striking illustrations for language study and construction of words. In many instances the basic idea of the Navaho technical term is quite obvious, while in others it is obscure, which has been noted, especially where, for instance, comparisons seem far-fetched. And, while the list makes no pretense at completeness, it is hoped that many suggestions, especially for the student of philology, will be found therein.

There can hardly be a question as to the facility of the Navaho mind for particularization. As to generalization, the Navaho is certainly not devoid of it, and while there seems to be no trace of botanical orders, as our text books present them, we find unmistakable proofs of observation, which group certain species under one order. Such, for instance, are grasses, *tłō*; seed-dropping grasses, *tłōdē*; tobaccos, *na'ō*; spruces, *chō*; junipers, *gād*; cactuses, *qōsh*; foods, *dā*, etc. In these and similar groups, the general name of the plant is applied to all, but a word expressive of some peculiarity is added to designate the species or variety. For illustrations see list.

Since so many indications of generalization are extant, an effort was made to seek further evidences of this kind by grouping the plants according to the Navaho classification. Beyond the general designation of "azē," however, nothing definite could be obtained. This plan, therefor, had to be abandoned, and the present one, of grouping them according to the accepted orders, resorted to. These, with their various species, have been alphabetically arranged, and a transliteration of the Navaho names has been added in brackets.

And since it was desirable to have the list as complete as possible, not only indigenous plants have been entered upon the list, but also such grasses, shrubs, fruits and vegetables as have been introduced and to which the Navaho have given names.

AMARANTACEAE (*Amaranth Family*).—

chīl deinfni, (sharp or cutting plant), Russian thistle, *Salsola Kali var. tragus*. (*Chenopodiaceæ* [?])

naskhādi, (spread out), rolling or tumble weed, *Amarantus blitoides*.

tłō' deiskīdi, (hilly seed grass), *Amarantus retroflexus*. The leaves and seeds are edible when mixed with grease.

tłō' dēnayfsi, (turning or rolling seed grass), tumble weed, *Amarantus albus*.

ANACARDIACEAE (*Cashew Family*).—

chīlchīn, (abbreviated from *lichī*, red, and *nīchfn*, odorous),

is said to be so called from the strong odor of the seed. The aromatic sumac, *Rhus aromatica* var. *trilobata*.

Another name for it is *kī*, by which the small stick or twig is meant, which was sharpened and driven into the reed-shaft, and fastened there with sinew. The arrow point was secured to this stick, which was therefor called *bikf*, its stick, or simply *kī*, as in expressions like *kī hashá*, I am going for *kī*, or sticks.

The word is also rendered and used by some as *tsfnlchín* (*tslchín*, *tslchín*), in which sense it would point to the odor of the shrub or wood.

ishfshjíd, poison ivy (!), *Rhus toxicodendron*.

ASCLEPIADACEAE (*Milkweed Family*).

dóbichîjîlchf', (*dō*, negative particle; *bichî'*, towards or for it; *jîlchî'*, or *yîlchî'*, give birth, therefor, birth preventing). Silk- or milkweed, *Asclepias Hallii*.

jádîldéi, (*jádi*, antelope; *il*, or *yîl*, like it; *dē*, horn, therefor, like antelope horns, i. e., leaves), *Asclepiodora decumbens*.

tl'ish ildéi tsōs, (slender, snake-horn like), silk- or milkweed, *Asclepias verticillata*.

The latter two are referred to as *abě' huló*, milky.

azē jîghaf, (whitish medicine), *Asclepias verticillata*.

AURANTIACEAE (*Orange Family*).—

chîl hitso lakhánigi, (sweet yellow plant), orange, *Citrus aurantium*.

chîl hitso dokōzhigi, (sour yellow plant), lemon, *Citrus limonum*.

Oranges and lemons are known to the Navaho only as fruit. Both are called *chîl hitso*, yellow plant, but many acquainted with both make a distinction by adding *lakhánigi*, sweet, for the orange, and *dokōzhigi*, sour, for the lemon.

BERBERIDACEAE (*Barberry Family*).—

tsiyá chéchéil, (*tsiya*, or *tsinya*, under the trees; *chéchéil*, or

tsé'chil, rock plant), barberry, *Berberis Repens*.

BORRAGINACEAE (*Borage Family*).—

azē qá'jini, (azē, medicine; qa, from out of ground; jín, black, i. e., black-streaked stock), gromwell, *Lithospermum angustifolium*.

azē qá'jini hábá'igi, (grayish-black stock), gromwell, *Lithospermum multiflorum*.

ijéhe, (which is gummy), *Echinosperrum Redowskii*.

ijéhe hábá'igi, (gray gummy one), *Krynitzkia crassisejala*.

The last two named species are commonly called ijéhe.

azē nánesdizi tsós, (slender, winding medicine), stone-seed gromwell, *Lithospermum canescens*.

tqázhi n'chín, (turkey odor), meadow rue (?), *Krynitzkia glomerata*.

CACTACEAE (*Cactus Family*).—

The cactuses are designated as qōsh, or whōsh, thorn, spine. The ribs are called bitá, leaves, and these are either round, nūmási, or, as in the spreading or prostrate species, ntqéli numásigi, wide-roundish. The various species have been grouped here without reference to their technical terminology. They are probably mostly varieties of *Cereus*.

dí'chí bowhōsh, (hunger cactus).

jéi ná'yogisi, (twisted heart), so called because when eaten it is said to make one feel as if his heart were twisted.

kā' bí'zhi, (braided arrow), so called from its interbraided leaves.

qōs détsahi, (awled cactus), named after its long, awl-like spines.

qōs détsahi tsō, (big awl cactus), cane cactus, *Opuntia arborescens*.

qōs détsahi tsōs, or qostsōs, (slender awl cactus).

qōsh, (a thorn), the common red cactus, *Opuntia rutila* (?).

qōsh dānānes'áhi, (cactus with thorny rim).

qōsh díltqóhi, (smooth cactus).

qōsh dīnesbīni, (squatting cactus), a large number of round heads forming dense hemispherical masses. *Cereus Phœniceus*.

qōsh dokōzhi, (saline or sour cactus), so called from its taste: small orbicular.

qōsh kīneshbīzhi, (broken braid cactus), so called from its similarity to the food preparation, kīneshbīzhi, braided dumplings.

qōs hīsói, (yellow cactus).

qōsh ntqēli, (broad cactus), prickly pear, *Opuntia Missouriensis*.

qōsh ntqēl labá'igi, (grayish broad cactus).

qōsh sēdāhi, (sitting cactus), one or few heads with conically shaped apex, *Cereus conoides*.

qōstso, (big cactus), *Opuntia Comanchica*.

CAMPANULACEAE (*Campanula Family*).—

tqādidfn dotlīsh altsīsigi, (small blue pollen), the harebell, bell flower, *Campanula uniflora*.

CAPPARIDACEAE (*Caper Family*).—

wā', the bee-weed, or spider flower, *Cleome pungens* (Sonora [?]).

CAPRIFOLIACEAE (*Honeysuckle Family*).—

tsētsokin, the snow-berry, or Indian currant, *Symphoricarpo*.
ndashjin, or tlō'dēi, marsh elder, high water shrub, *Viburnum*.

CARYOPHYLLACEAE (*Pink Family*).—

azē tlōhi, (grass medicine), the sandwort, *Arenaria aculeata*.
dzīl nātō' tsōs, (slender mountain tobacco), the catchfly, *Silene Douglasii*.

tqakhāsākhād, (standing on the water), the mouse-ear, *Cerastium arvense*.

CHENOPODIACEAE (*Goosefoot Family*).—

chīl beshndlēzhi, (plaster plant), a saponaceous plant.

chīl lichfigi, (red plant), the common beet, *Beta vulgaris*.

duwúzhī, or duwúzhizhfn, black greasewood, *Sarcobatus vermiculatus*.

duwūzhīlbaí, gray greasewood, *Atriplex canescens*.

gǎ'tsodá, (jackrabbit food), white sage, or winterfat, *Eurotia lanata*.

léchāi yikéchî, (dogs defecate upon it), a variety of *Sarcobatus*.

mâ'istqēi, (coyotes rest there), another variety of *Sarcobatus*.

tǎkōzh, (salt-weed), or tǎkōzh yidánigi, (edible salt-weed), *Atriplex argentea*.

tǎkōzh sēzfni, (standing salt-weed), *Atriplex expansa*.

tǎkōzh deiníni, (sharp salt-weed), *Atriplex confertifolia*.

tlō'déi, (seed grass), pigweed, *Chenopodium Fremontii*.

tlō'déi ntlízi, (hard seed grass), *Chenopodium*.

tlō'déitso, (big seed grass), lamb's quarters, *Chenopodium album*.

tqō ishf, (water blackens it), *Chenopodium leptophyllum*.

tsíyā tlō'déi, (seed grass under a tree or log), *Chenopodium cornutum*, or *Teloxis cornuta*.

COMPOSITAE (*Composite Family*).—

altqānetséhi, (interlocking plant), cockle-bur, clot-bur, *Xanthium strumarium var. Canadense*.

atsánlchīn, (odorous of the eagle), the aster.

azé disós, (glittering medicine), so called probably on account of its glossy root, cudweed, *Gnaphalium Sprengelii*.

azé dlóhi, (laughing medicine), the yellow thistle (poisonous), *Cnicus Neo-Mexicanus*.

azé hokháni labá'igi, (gray terraced medicine), the sow thistle, *Lactuca* or *Sonchus asper*.

azé hokháni tso, (big terraced medicine), the plumed thistle, *Ochocentrus*.

azé iltsaí, (dried medicine), milfoil, *Achillea*.

azé lǎkhǎn, (sweet medicine), *Actinella scabiosa*.

azé náóltqādi, (unwinding medicine), *Townsendia serica*.

azé náóltqādi altsōsigi, (slender unwinding medicine).

azé náóltqādi tso, (big unwinding medicine).

The above three are so called from their use in connection with ceremonial knots, wóltqād. The herbs are chewed and spat upon the knots, which are then unravelled; hence the name, unwinding medicine.

azé ndōgaf (white stalk medicine), a sage-brush, *Artemisia franserioides*.

azé ntqéli, (broad medicine).

azé háldzid, (decayed medicine), *Xymenopappus filifolius*.

azéwhō', (tooth-leaved medicine), the rayless golden rod, *Bigelovia Vaseyi*.

bīlqāzhchīf', (odorous with the breeze), because its fragrance is carried on the breeze, the thoroughwort, *Epatorium occidentale*.

chīl dilyfsi (tsīldilyfsi), dodgeweed, *Gutierrezia euthamiae*.

chīl lichfi, (red plant), the radish, *Raphanus sativus*. The same word is also used for tomato and beet. These vegetables are not indigenous, but after being introduced they became known to the Indians by their color. In like manner cabbage, turnips and white radishes are called chīl hāgaf, white plants.

chīl tsōs, (slender plant), *Aplopappus lanuginosus*.

chīl whōshi, (thorny plant), the bur-marigold, *Bidens*.

chīlzhó (ilzhóli, limber, limber plant), *Actinella Richardsonii*.

chīndi chīl, (evil spirit weed), *Bigelovia graveolens*.

hazailtsēi, (like a squirrel's tail), yarrow, *Achillea millefolium*.

jádi ná'tō', (antelope tobacco), or dinǎ'ě chīl, (people's weed), *Lygodesmia rostrata*.

kalúgi dā, (butterfly food), fleabane, *Erigeron flagellaris*.

kasdā bēgá, (an antidote for arrow poison), thoroughwort, *Eupatorium purpurium*. The poison was usually added to the arrow-point fastened to the shaft, kasdā.

kīltsōi, (yellow twig), the rayless golden rod, *Bigelovia graveolens var. albicaulis*.

kīltsōi ntsáigi, (big yellow twig), *Bigelovia albicaulis*.

má'i chīl, (coyote plant), golden rod, *Solidago nemoralis*.

nă'ôhi yilt'áhi, (leaves like the bean), marigold, Spanish needles, *Bidens bipinnata*.

năëshjā ilkhēi, (like owl's claws), sneeze weed, *Helenium Hoopesii*.

nashjēidā lab'īgi, (gray spider food), garden daisy, *Bellis integrifolia*.

ndiyfli, common sunflower, *Helianthus*.

ndiyfli tsōs, slender sunflower, *Gymnolomia multiflora*.

ndiyfli tso, large, cultivated sunflower.

ndiyfli nłchfni, odorous sunflower, *Gymnolomia* (?).

ndiyfli nłchfnitso, large, odorous sunflower, *Helianthus Nutt-allii*.

nī'nīl tsō, (big snuff), aster, starwort, *Aster canescens*.

nī'nīl ntsāigi, (large snuff), zinnia, *Zinnia grandiflora*.

nī'nīl tsōs, (slender snuff), *Townsendia strigosa*.

qōsh bēldēi, (spine brush), groundsel, *Senecio Douglasii*.

CONVULVULACEAE (*Convolvulus Family*).—

nāqoyai (nahuyai), the name of an unidentified plant with a fleshy, tuberous root. In some places this name is also applied to the sweet potato, which is not raised here, but is known through the whites. Many now call them

númasi tso lakhānigi, sweet potato, *Batatas edulis*.

tsīghājilchī, (red hair), the dodder, *Cuscuta umbellata*.

CRUCIFERAE (*Mustard Family*).—

alīzh bēidzōl, (it splurts the urine), whitlow grass, *Draba montana*.

azē dotfīsh, (blue medicine), watercress, *Nasturtium obtusum*.

azē lab'īgi, (gray medicine), rockcress, *Arabis communis*.

azē lādilt'éhi, (scattered medicine), so called because it does not grow in clusters, but singly, rockcress, *Arabis Holboellii*.

azē qágai, (medicine coming out white), that is, with a white stock, *Stanleya pinnatifida*.

azētso, (big medicine), false wallflower, *Erysimum asperum*.

azétsōs, (slender medicine), bladderpod, *Vesicaria alpina*, or *Phlox Douglasii*, (Polemoniaceae).

azétsōs ałtsısi, (small slender medicine), pennycress, *Thlaspi alpestre*.

chıl lagái, (white plant), cabbage and cauliflower, which have been introduced by the whites. Both are varieties of *Brassica oleracea*.

nānchād azé, (medicine for swelling), *Thelipodium Wrightii*.

nānodōzi, (striped seeds), pennyroyal, *Thlaspi* (?).

nashjēidā, (spider food), or hastsēłtsi, (hair like the gods), bladderpod, *Vesicaria Fendleri*.

ostsē, hedge mustard, *Sisymbrium incisum*.

tqāłkhādahikhāl, (spreads on water), watercress, *Nasturtium alpinum*.

tsābı (?), *Physaria*.

tsāhaltsa, (a receptacle like the paunch), pepper-grass, *Lepidium montanum*.

tséyāhatqāl, (it sings below the tree), so called from the noise it produces when shaken, hedge mustard, *Brassica campestris*.

CUPULIFERAE (*Oak Family*).—

chēchıl (tsétsil, tséchil, rock plant),- the oak, *Quercus undulata*.

chēchıl ntłsi, (hard rock plant), scrub oak, *Quercus undulata pungens*.

chēchıl ntłzi bukhâ, male of preceding, *Quercus undulata brevifolia*.

kış, alder, *Alnus incana* var. *virescens*.

kışzhini, iron-wood, hornbeam, *Carpinus Americana* (Corylaceae, mastworts [?]).

CUCURBITACEAE (*Gourd Family*).—

dā'neskāni, cantaloupe, muskmelon, *Cucumis melo*.

nayzi, nayzilch, squash, pumpkin, *Cucurbita*.

tēchīyá (tējīyáni, which is eaten green), watermelon, *Cucumis citrillus*, *Citrillus vulgaris*.

EUPHORBACEAE (*Spurge Family*).—

chīl abē' nltšdsigi, (slender milkweed), *Euphorbia montana*.

khétsî hahchî, (red near the root), *Euphorbia Pringlei*.

nāāchī azē, (pimple medicine), spurge, *Euphorbia montana*.

nashjēidā, (spider food), or nāāsh'tēhēdā, (gopher food), *Croton Texensis*.

FILICES (*Fern Family*).—

jā nltšlīdā, (bat food), lipfern, *Cheilanthes lanuginosa*.

FUMARIACEAE (*Fumitory Family*).—

nasbīdi dā, (turtle-dove food), *Corydalis aurea var. occidentalis*.

GENTIANACEAE (*Gentian Family*).—

bî'hīljāi, (like deer's ear), *Frasera speciosa*.

chīl behētlōl hltšōigi, (plant with a yellow root), *Frasera*.

chīl behētlōl nnāezigi, (plant with a long root), *Frasera speciosa*.

īnzīd chīl (īnīzf' chīl, witch plant), *Gentiana affinis*.

GERANIACEAE (*Geranium Family*).—

chōlchīn īltšāi, (leaves like those of the phlox), *geranium incisum*.

dzīli bilāshgān, (claws of the sparrow-hawk), *alfilaria*, storksbill, pin-grass, *Erodium cicutarium*.

GNETACEAE (*Joint-firs*).—

tlō' azē, (grass medicine), *Ephedra trifurcata*. Some mistake this for *Equisetum*, horsetail.

GRAMINEAE (*Grasses*).—

dākhāz lakhānigi, (sweet stalk), sugar-cane, *Saccharum officinarum*.

hī nadá (hī bidá, horse corn), oats, *Avena*.

lúkā' (dlókā', arrow grass [?]), reed, *Phragmites communis*.

lúkātso, the cane-reed, *Phragmites*.

nadá, corn, maize, *Zea mays*, *Phalareae*.

ndidlídi, (scorched), so called because the seeds were obtained by scorching it, mountain rice, *Oryzopsis cuspidata*.

zéilāwhōi, (it runs into the throat), so called for its tendency to slip down the throat, wild rye, fox- or squirrel-tail grass, *Hordeum jubatum*.

bæězhó, the broom. There are several varieties of these grasses, of unidentified species. The stems grow from six to fifteen inches high, and when dry are very stiff, for which reason they are employed in making native hairbrushes and brooms. A bunch of the dried grass is tied firmly together so that the butt ends present a flat surface. A twig of cedar (gād nī'ēli) is inserted into the hairbrush as a talisman.

bæězhó, rush-grass, *Aristida oligantha*.

dlū bæězhó, (prairie dog broom), so called because it is observed to grow near prairie dog colonies, *Sporobolus cuspidata*.

tsétqā' bæězhó, (cañon broom), which is also called atsá bæězhó, (eagle broom).

bæězhó sházhi, (knotted broom), from the numerous knots on its stem.

neshchfyá bæězhó, (broom under the pines), where it is usually found.

tl'ish bæězhó, (snake broom).

bæězhó náneskhāli, (coiled broom), from its propensity to coil around the top of the stem.

tl'ó', grass, hay in general; tl'ó' hī ilchózhigi, grass upon which horses graze. Under this caption all forage grasses and shrubs are classified. Some are given here, others may be found under their respective order, for instance, alfalfa and clover under *Leguminae*.

tl'ó' dichfzh, (rough grass); tl'ó' beětsós hulónigi, (plumed grass); tl'ó' daástsfni, (grass with leaves like wood); tl'ó' tsáhi

(tl'ō'tsaí, awl-grass), which is probably indentical with tl'ō' dahikháhi; tl'ō'tso, (big grass); tl'ō' htsóí, (yellow grass); tl'ō'lé, (?).

tl'ō' nadá, (corn-grass), wheat, *Triticum vulgare*.

nishchfyā tl'ō', (grass under the piñons).

tsíyā tl'ō', (grass which grows under logs), meadow-grass, *Phragmites andina*.

tl'ō' tsósi, (slender grass), rush-grass, *Sporobolus cryptandrus*.

tl'ō' nastqási, (bent grass), grama grass, *Bouteloua hirsuta*.

hazēildái, (like squirrel food).

tl'ō' áshíhi, (salty grass), because of its salty taste.

tl'ō' qōsh, (prickly grass), bur-grass, or hedgehog grass, *Cenchrus tribuloides*.

alós (Sp. arroz), rice, is known only as a cereal purchased at the stores, *Oryza sativa*.

HYDROPHYLLACEAE (*Waterleaf Family*).—

azé nchíhi labá'igi, (gray angry medicine), *Phaselia glandulosa*.

IRIDACEAE (*Iris Family*).—

tqēl bit'á lánigi, (broad, with many leaves), flower de luce, or flag, *Iris Missouriensis*.

tqēl nfyízi, broad flag, *Iris*.

JUGLANDACEAE (*Jugland Family*).—

qāālsédi, the walnut, *Juglans*.

JUNCACEAE (*Rush Family*).—

altqín jikázhi, (bow grinder), rush grass, *Juncus*.

LABIATAE (*Mint Family*).—

azé nchíhi, (irritating medicine), dragon's-head, *Dracocephalum parviflorum*; or sage, *Salvia* (?).

azé ndōt'ézhi, (medicine which is laced), horse-mint, *Monarda*.

châl dá, (frog food), sage, *Salvia canceolata* (*Lygodesmia grandiflora*, *Compositæ*).

tłō' nłchłni, (odorous grass), American pennyroyal, *Hedeoma Drummondii*.

tséki naálchłzhi, (which rubs against the rock), hedge hyssop, *Lophanthus urticifolia*.

LEGUMINOSAE (*Pulse Family*),—

altqānetséhi tsōs, (slender interlocking), *Glycyrrhiza lepidota*.

azé bā'áde, (female medicine), *Lupinus brevicaulis*.

azé bā'ádē tso, (big female medicine), rattleneck, *Astragalus Matthewsii*.

azé bakhá'ě, (male medicine), *Lupinus*.

azé bakhá'ě tso, (big male medicine). The larger of the two species is always male. Reference is here made to the use of these plants as medicines in the male and female chants of arrow shooting.

azé dilqil, (dark medicine), milk vetch, *Astragalus Mortoni*.

azé tsōs labá'igi, (slender gray medicine), sensitive brier, *Shrankia*.

azé tsōs ntsáigi, (large slender medicine), sensitive brier, *Shrankia*.

chí'dá tsōs, vetch or tare, *Vicia Americana*.

chil nánesdisi, (medicine twisting along the ground), *Hosackia Wrightii*.

chōzh azé, (boil medicine), lupine, *Lupinus Lyallii*.

daāgháli, (rattling), rattleneck, *Astragalus*.

děbē haiclídi ntsáigi, (the larger one of those that the sheep scratch out), *Oxytropis*.

debē ná'fō', or debē dā, (sheep tobacco, or sheep food), *Oxytropis*.

hastqúi tsīyáel, (old man's queue), prairie clover, *Petalostemon candidus var. occidentalis*.

má'idā, (coyote food), also called kfishzhini, the wild cherry, *Astragalus*.

má'i náöljil azé, (medicine for hydrophobic coyote), *Oxytropis*.

nāāstšósi iljái, (like mouse-ear), clover, *Trifolium errocephalum*.

nā'óhi, the bean, *Faba vulgaris*.

nā'óhi iltái, (leaves like the bean), everlasting pea, *Lathyrus polymorphus*.

nā'óhi numázigi, (round bean), the pea, *Pisum sativum*. The large brown bean, or Mexican frijoles, are now raised very extensively.

nāt'ó' wái, (wā tobacco), *Psoralea tenuiflora*.

nibéshjē, (pasted to the ground), *Hosackia*.

tľó' wáigi, (wā grass), alfalfa, lucerne, *Medicago sativa*.

tľó' wā nahalínigi, (grass resembling wā), white clover, *Trifolium repens*. The latter two are of recent introduction, and their names are taken from the resemblance of their leaves to those of the spider flower, wā'.

tqáhólchōshi, (the forehead pops it), as the pod is easily burst when pressed to the forehead, rattleweed, *Astragalus triflorus*.

tqáhólchōshi tsós, a slender tqáhólchōshi (tqá'ilchōshi).

belagána neshchí, (American piñon nuts), peanuts, which may be purchased at the stores, *Arachis hypogoea*.

LEMNACEAE (*Duckweed Family*).—

tqátłid, (water scum), duckweed, *Lemna minor*.

LILIACEAE (*Lily Family*).—

alchíni dā, (children's food), *Calochortus Nuttallii*.

altsíni, mariposa lily, *Calochortus luteus*.

altsíni tso, hog's potato, or death camass, *Zygadenus venenosus*.

azé tľóhi, (grass medicine), blue-eyed grass, *Sisyrinchium mucronatum*.

tľó'chíni, (smelling grass), wild onion, *Allium Palmeri*.

tľó'chín tso, (large onion), the large, cultivated onion, *Allium cepa*.

tľó'chínłchí, (red onion), or gáge tľó'chín, (crow's onion), the nodding onion, *Allium cernum*.

Four varieties of yucca are mentioned:

tsázî bidé, (horned yucca).

tsázî ntqéli (sázî ntqéli, broad standing awl), Spanish bayonet, *Yucca baccata*. As the roots of this species furnish a rich lather the plant is frequently referred to as tqálăwhûsh, soap. Its fruit, too, is eaten, and the plant is then called hashkân, yucca syrup.

tsázî tsôs, (slender yucca), *Yucca glauca* (Nuttall), or *Yucca angustifolia* (Pursh).

yéibitsázî, (yucca of the gods), *Yucca radiosa*; Trelease Whipplei (Matthews), or *elata* (Engelmann).

LINACEAE (*Flax Family*).—

azé ntlîni labá'igi, (gray gummy medicine), *Spheralcea angustifolia*.

dinǎ'ě chîl altsôsigi, (slender people's plant), yellow flax, *Lineum rigidum*.

lâtqăhadîjol, (round blossoms), flax, *Lineum rigidum*.

LOASACEAE (*Loasads*).—

chî hălchîn, (odor of chî [?]), *Mentzelia nuda*.

itlîhi, (tenacious), because its leaves adhere to one's clothes, *Mentzelia multiflora*.

itlîhi tsôs, (the slender species), *Mentzelia pumila*.

LOBELIACEAE (*Lobelia Family*).—

dakitqhi ildáhi, (like hummingbird's lip), cardinal flower, *Lobelia splendens*, or *cardinalis*.

LORANTHACEAE (*Loranth Family*).—

da'tsă', (by syncope from wódă', above, basket on high), mistletoe, *Phoradendron juniperum*.

MALVACEAE (*Mallow Family*).—

azé ntlîni, (gummy medicine), false mallow, *Malvastrum coccineum*.

hī dā, (horse food), mallow, *Sidalcea malvæflora*.

MORACEAE (*Mulberry Family*).—

hashkân, (the fig), which is known only as a commercial article, *Ficus carica*. See also Phœnicidæ and Spanish bayonet under Liliaceæ.

NYCTAGINACEAE (*Four-o'clock Family*).—

kīnædlīshi dā, (stink bug food), *Abronia fragrans*.

kīnædlīshi dā lābā'igi, (gray stink bug food), *Abronia* (?).

tlīsh nāt'ō', (snake tobacco), four-o'clock, *Mirabilis oxybaphoides*.

tsēdidé, (probably which works itself into the rock), four-o'clock, *Mirabilis*.

tléhīgāi ntsāhi, (the large one which blooms at night), four-o'clock, *Mirabilis multiflora*.

OLEACEAE (*Olive Family*).—

dinæ'ē chīl, (Indian plant), *Menodora scabra*.

ONAGRACEAE (*Evening Primrose Family*).—

azé behétsī' hāłhī, (medicine which is red near the root), evening primrose, *Oenothera tenacetifolia*.

azé lītso, (yellow medicine), evening primrose, *Oenothera grandiflora*.

azé sākāz, (cold medicine), *Gaura parviflora*.

azé sēsī' (azé hasī, crampy [?] medicine), evening primrose, *Oenothera pinnatifolia*.

chīl lātqā ātsōs, (feather flower plant), willow herb, *Epilobium coloratum*.

qōsh chfītso, (great angry spine).

qōsh chfītsōs, (slender angry spine), willow herb, *Epilobium organifolium*.

tléhīgāi lābā'igi, (the gray plant blooming at night), evening primrose, *Oenothera caespitosa*.

tsétqǎ' débé chīl, (big-horn plant), willow herb, *Epilobium spicatum*.

OROBANCHACEAE (*Broom-rape Family*).—

lēdōlǎézi, (footprints in the dirt), from its distant resemblance to a moccasined foot partly sunk into the ground, cancer root, *Aphyllon fasciculatum*.

PHOENICIDAE (*Phoenix Family*).—

hāshkān, (syrup), date, *Phoenix dactylifera*. Known to the Navaho only by the fruit bought at the stores. The same name is given to the fig.

PIPERACEAE (*Pepperwort Family*).—

azé dīchī lǎbá'igi, (gray sharp medicine), black pepper, *Piper nigrum*. Known only as a commercial article.

PLANTAGINACEAE (*Plantain Family*).—

azé it'ǎl (?), plantain, *Plantago gnaphalioides*.

POLEMONIACEAE (*Polemonium Family*).—

atsá nāt'ó', (eagle tobacco), *Gilia longiflora*.
chōlēchīn, (spruce odor), *Phlox cæspitosa*.
dahitqfhi dā, (hummingbird food), *Gilia aggregata* var. *attenuata*.

POLYGONACEAE (*Buckwheat Family*).—

azé nībaghántī', (medicine which winds through the ground), *Eriogonum alatum*.

nībaghántī' ntsáigi, (the large one), *Eriogonum racemosum*.

azé qá'ogīzi, or ǎlkésgīzi, (twisted medicine), *Eriogonum microthecum*.

biłnaāt'ó'i, (which is mixed with the tobacco), *Eriogonum Jamesii*.

bísndōchī, (adobe is red with it), so called, probably, because

it gives the landscape the appearance of red adobe, *Eriogonum fasciculatum*.

bísndōchī bǎǎde, the female species, which is smaller in size than the preceding, and is probably identical with it, *Eriogonum microthecum*.

chātīni (jātīni), sorrel, *Rumex hymenosepalum, occidentale*.

lé āzē, (earth medicine), *Eriogonum*.

wōlāchī dā, (ant food), *Eriogonum*.

RANUNCULACEAE (*Crowfoot Family*).—

chīl nǎǎtlǒi tso, (big winding plant), virgin's bower, *Clematis ligustifolia*.

kēhótqēli, (it spreads over the ground), larkspur, *Delphinium scaposum*, or *bicolor*. As this plant is used extensively as pollen, the plant is also called tqǎdǎdǎn dotlǎsh, blue pollen.

lǎetso ilǎǎ, (which is like the ear of a rat), buttercup, *Ranunculus cymbalaria*.

tqǎzhi nǎchīn, (turkey odor), *Thalictrum Fendleri*.

RHAMNACEAE (*Buckthorn Family*).—

bí'dā, or dinǎ'ě chīl, (deer corn, or people's food), New Jersey tea, *Ceanothus Fendleri*.

chī'dā (?), *Ceanothus* (Fendleri [?]).

ROSACEAE (*Rose Family*).—

awǎtsǎl, (baby's bedding), the cliff rose, *Cowania Mexicana*.

azé hōkhá, five fingers, *Potentilla gracilis*.

azé ntǎfni tso, (big adhesive medicine), goose-grass, or five fingers, *Potentilla strigosa*.

bís dǎāshchīl, (the plant which binds the rim of adobe). This plant is closely allied to mountain mahogany.

chīl nǎǎtlǒi tso, (the big weaving plant), the prune, *Prunus domestica*. The prune is known only as a commercial article, and derives its name from its resemblance to the grape.

chō (chú'), the wild rose, *Rosa Fendleri*.

dzǎdzé, the choke-cherry, *Prunus virginiana*.

džídzé díťódi, (soft berry), service-berry, Amelanchier.

džídzé dokózhi, (sour berry). This name is also applied to the apricot of commerce, Prunus Armeniaca.

džídzétso, (big choke-cherry), the peach, which is grown in large quantities at Cañon de Chelley, and other localities with facilities for irrigation, Amygdalus Persica, sub-order Drupaceae.

mâ'idá, (coyote food), the wild cherry, Prunus demissa, Forstiera Neo-Mexicana.

kínjíl'áhi, the currant, Purshia tridentata.

tséěsdāzi, (heavy as stone), mountain mahogany, Cercocarpus parvifolius.

tséěsgízi, (twisted stone), June-berry, Amelanchier alnifolia.

SALICINEAE (*Willow Family*).—

kaí, the willow, Salix; kailbaí, the gray willow.

tīs, the cottonwood, Populus Fremontii, or angulata.

tīsbaí, (gray cottonwood), aspen, or quaking asp, Populus tremuloides.

tístsós, (slender cottonwood), Populus angustifolia.

SANTALACEAE (*Sandalwort Family*).—

chil abé, (milk plant), bastard toad flax, Comandra pallida.

SAPINDACEAE (*Soapwort, or Maple Family*).—

sól, (by syncope from ilzhóli, fuzzy), box elder, Negundo aceroides.

sól díchíshi, rough elder (?).

SAXIFRAGACEAE (*Saxifrage Family*).—

belásána, a corruption from the Spanish manzano, the apple, Pirus malus.

belásána bitsé hulóni, (apple with a tail), the pear, Pirus communis. Few apples are grown in the Navaho country, and the pear is only known as the canned article of commerce.

chil koqyéhě, (coffee plant), because formerly a beverage was

prepared from it. Usually it is called whotsíni azé, (tooth-gum medicine), which is the alun root, *Heuchera bracteata*.

tsétqǎ sǎkhádi, (clustered in cañons), *Tellima tenella*.

tsítłiz, (hard wood), *Findlera rupicola*. tsíntłiz, hard wood, is the general term for all hard woods, like tséěsdāzi, mountain mahogany; chû', wild rose; kǐnjǐl'áhi, currant, and numerous others. As the *Findlera rupicola* is a hard wood plant, some use both tsítłiz and tsíntłiz to designate it.

tséěsdisi (tséěsgizi, twisted stone), currant, *Ribes*.

SCROPHULARIACEAE (*Figwort Family*).—

azé nchíhi tso, (big irritating medicine), beard tongue, *Pentstemon azureus*.

azé nláli, beard tongue, *Pentstemon glaber*.

azé qíná, or ínájì azé, (life medicine), *Pentstemon ambiguus*, or *laricifolius*. Cf. also Geraniaceae. A large variety of herbs are designated and used as qíná azé, healing medicine or tonic.

cháchösh azé, (tlandular swelling medicine), *Cordylanthus ramosus*.

dahitqǐhi dā tso, (big hummingbird's food), painted cup, *Castilleja integra*.

dahitqǐhi dā lǎbá'igi, (gray hummingbird's food), painted cup, *Castilleja parviflora*.

dahitqǐhi dā tsös, (slender hummingbird's food), beard tongue, *Pentstemon barbatus* var. *Foreyi*.

dishchíd azé, (itch medicine), *Cordylanthus Kingi*.

nát'ö' nłchǐn, (smelling tobacco), *Castilleja minor*.

SOLANACEAE (*Nightshade Family*).—

azé díchǐ lichfigi, (red sharp medicine), chilli, or red pepper, *Capsicum*. The Navaho do not cultivate chilli.

bǐhıldē, (leaves like deer horns), ground cherry, *Physalis lanceolata* var. *lanigata*.

chóhøjilyaí, jimson-weed, or thorn apple, *Datura stramonium*.

dzǐl nát'ö', (mountain tobacco), wild tobacco, *Nicotiana atten-*

uata. Tobacco is used extensively in ceremonies, and the following designations are presumably due to this feature.

debé nāt'ō', (sheep tobacco), found in malpais districts; dlú'i nāt'ō', (weasel's tobacco); kōs nāt'ō', (cloud tobacco); tlišh nāt'ō', (snake tobacco); shāsh nāt'ō', (bear tobacco), all of which are probably identical with wild tobacco.

nāt'ō' wā'i, (wā-tobacco), designates wild tobacco found in the valleys.

hashchē'dā, (food of the gods), boxthorn, *Lycium pallidum*, *tribe Atropeæ*.

nāłtsúi, (yellow seeds), nightshade, *Solanum heterodoxum*.

numāzi, (globular), wild potato, *Solanum*.

númāsitso, (the big round one), the cultivated potato, *Solanum tuberosum*.

tlišh dā, (snake food), nightshade, *Solanum triflorum*.

TYPHACEAE (*Cat-tail Family*).

tqēł, (broad), cat-tail flag, *Typha latifolia*.

ULMACEAE (*Elm Family*).—

jīłqázhi, hackberry, *Celtis*.

UMBELLIFERAE (*Parsley Family*).—

azé nłchīn, (odorous medicine), peppermint, *Cymopterus alpinus*.

chāhāsht'ézhi (chāsht'ézhi), gamot, *Cymopterus montanus*.

chīł litsōi, (yellow plant), carrot, *Daucus carota*.

hazaāl'é' (?), gamot, *Cymopterus glomeratus*.

hazaal'é' tso, *Ferula multifida*.

nānodōzi, (striped seeds), caraway seed, *Carum*.

URTICACEAE (*Nettle Family*).—

kīsh'íshjīsh (gīshīshjīsh), nettle, *Urtica*.

VERBENACEAE (*Vervain Family*).—

azé hadfígaí, (medicine producing soreness), vervain, *Verbena stricta*.

azé nehfi, (irritating medicine), *Verbena Aubletia*.

VIOLACEAE (*Violet Family*).—

tlējí chî, violet (?), *Viola*.

tqôlchîn, (odor of water).

VITACEAE (*Vine Family*).—

chîl nă'ătlôî, (weaving plant), Virginia creeper, *Ampelopsis quinquefolia*. The same name is also applied to the grapevine, *Vitis vinifera*.

ZYGOPHLLACEAE (*Beancaper Family*).—

shăsh năt'ô', (bear tobacco), *Tribulus maximus*.

UNIDENTIFIED PLANTS

The following plant names were not identified, and the transliteration only is given.

ajă kû hălchîn, whose seed has the odor of the ear (?).

ăt'ă tso, big leaves;ăt'ă tsôs, slender leaves.

atsă azé, eagle medicine.

ăwăé biyalăi yîlbézh, which boils the placenta.

ayăn bilîzh hălchîni, which smells of the urine of the buffalo.

ăyă'ăi, which is standing up (?).

azé bijîchiigi, the core of the root of which is red.

azé bîni'î', medicine of the mind, in reference to its bewitching effects.

azé dîf'f', thick, mud-like medicine.

azé dishôigi, plushy medicine.

azé lăgaî, white medicine; azé lichî, red medicine.

bîlă'ăshdlă'i, five fingered.

chîl abé'ătsôsîgi, slender milkweed.

chîl aghâni, the plant fatal to flies, ants, moths, and the like, which alight upon it; chîl aghâni, the deathly plant, is another species fatal to both man and beast.

dihidí'a'i, an incense.

děbě kú hăchîn, whose seed smells of sheep.

dînás (?); dînástso, large dînás, mesquite (?).

dzîłkhêłchîn, the odor of a youth.

jîkhêłchîn, the odor of a maiden.

f'nîgi chîl, thunder plant; î'nêlne'jî chîl (?).

năětsă azé, pimple medicine.

năkăetqî, put into the cavity of the eye.

nakhéyîli, which is whirled along.

najîshôzhi, turned on its side.

ndôchî, red downward, a plant with a large red root.

nî'tsôsi, the veins of the earth.

nî'tsôsi tso, the large veins of the earth.

silátso (shilátso), my thumb.

tqojîqûidzo, which extends out of the water.

tsîłchîn îł'tăhi, leaves like the sumac.

tsîsdîsi, coiled nose, a tree found in the San Francisco range.

wôłăchî bēgă, antidote for ants.

ză'hozîhi (ză'hosî [?]).

Words referring to plants and their parts.

behétl'ôl (bikhétl'ôl), the root of a plant or tree.

khétsî (behétsî), its base.

bitsîn, its stalk; bitsîn, its pith.

bizhî', the pith (of some plants).

hałgîzh (dăhałgîzh), or bîdadî'ă', its branchlets.

bită, its leaves, which are described as ntqéli, broad; altsôsi, slender, long; qôsh hulóni, prickly, etc.

chîl bită, a blade of grass.

bilátqăhi, its flower.

bilatqă daălgaí, white flowered plants, or chîl bilátqă'igaí, the plants are in blossom (white).

bilatqă daăltsó, yellow flowered plants.

bilatqă daălchî, red topped flowers, or bilátqă'ichî, they are in blossom (red).

bilätqâ dadotlîsh, blue flowered plants.

bitqâitsöi, yellow interspersed, pumpkin or melons, etc., in blossom.

bizöl, its tassel, as of corn, wheat, etc.

bökô (bökû), or bilästsî, its seeds. The former is used for stone fruits, apples, melons; the latter for smaller seeds.

chîl binâ, plant seeds, or seed bearing plants.

chîl bichûg, or bichô', catkin of plants.

bitlöl, its vine or tendril, as of the grape, pumpkin, etc.

chîl, a plant, grass or weed.

nansê, vegetation, plants.

t'ô chîl, merely a plant (with no special purpose).

chîl sakhâd, a cluster of weeds, a bush, tuft of grass.

chîl naskhâdi, creepers, such as some gamots, wild potatoes, etc., or describing them as t'ô sakhâd, a small cluster, or naskhâd, a cluster spread out.

tsîn, a tree.

tsîn behétlöl, the root of a tree; bizîd, or bitsîn (bitsîni), its pith, pulp; bizês, punk (outgrowth on pine); dastqâl, exudation (from the fissure of the rind); âkhâst'ôsh (bâkhâst'ôsh), the rind; atqâtâhi (bitqâtâhi), the inner bark; azhî' (bizhî'), dried bark fibre (as of the cliff rose, or of cedar); je' (bijê), rosin; khêtsî, behêtsî, base (of a tree); bagân, or bitsâôz'â', its limbs or boughs, or bîdadî'â', its branches; bitâ, its leaves; achûg (bichûg), catkins of willow, cottonwoods, etc.

îl (bi'îl), needles of conifers (and their boughs).

binâ, its fruit, as chêchîl binâ, acorns; neshchî binâ, piñons.

halgîzh îdeshgîzh, the fork of a tree, as t'is îdeshgîzh, a forked cottonwood.

chîl yishdê', (yîdê, deshâ'), or qashdê' (qôldê'. qodêshdâ'), I pick flowers, grub weeds.

chîl hanshtqâ (hanétqâ, hadîneshtqâ), I look for plants or herbs.

chîl behétlöl nashgéd (naségyêd, ndêshgöl), I dig roots.

Mosses are variously designated: dlâd, a covering, or moss on stone or wood, and even meat, as ats' dlâd sêlf, the meat is musty.

tsédlād, rock-moss, lichen; tsínbâ dlād, tree moss; nǐ'hădlād, moss covering the ground; nahasés, moss found in hummocks; chō bidā ghā, moss of spruce.

Toadstool, or mushroom, is called abíshjā'.

ndílkhāl, the wild gourd.

nayízi, the squash, is designated as ábëshkhāni chō (bëshkhāni tso) in the night chant and others.

NAVAHO FOODS

The early Navaho subsisted chiefly on corn, which to-day still furnishes their chief sustenance. Owing, however, to conditions of war and constant change of domicile, it was not always possible to obtain corn, so that numerous seed bearing plants were drawn upon for a substitute. Whenever possible, too, small patches of beans, squashes and melons were raised, which with an abundance of venison, furnished sufficient variety of diet. Water furnished the usual drink with an occasional tea made from native herbs.

At present much of this early food has disappeared. The various grass seeds are no longer harvested, and venison has been almost entirely displaced by mutton and beef. Coffee, tea and goat milk have been added to the regular fare, while modern flour and cornmeal are usually preferred to the laborious task of grinding native corn. Squashes, pumpkins, melons, beans and potatoes are raised for the table wherever conditions permit, and in many districts wheat is turned into flour for domestic purposes.

Although some of the food preparations here listed are no longer in vogue, many of them are still largely preferred to the more expensive and less substantial modern store goods. The list comprises the various food preparations of corn and esculent herbs, to which is added a list of modern foods and beverages.

The most convenient method of preparing a food was a mush or porridge, which was made of green corn or of cornmeal.

ditłógi, or lēs'á ditłógi, green corn mush baked in ashes.

Green corn is ground on the metate and worked to the consistency of stiff dough, and then imbedded in layers of corn leaves or husks. These are placed in the fire and thoroughly covered with hot embers until baked. The noise produced in grinding and slapping the green corn on the metate suggested the name, *ditl'ógi*, in imitation of *tl'ög*, *tl'ög*.

tqabijái, the three ears, is mush boiled in a single corn leaf of which three pockets or ears have been formed. The corn leaf is wound once around the finger, and the opening thus formed filled with mush (*tqá'níl*) of green corn. Just opposite another pocket is made in the same manner, while the third pocket overlaps the other two. The pockets are then wrapped with the remainder of the leaf that they may retain their shape in boiling.

ntsídögóí, which bend their tips, designates a mush of green corn, replaced into the corn husk, the tips of which are then turned down. A number of these are placed side by side into a small trench, thoroughly heated, and covered with hot embers until well baked.

Mush is frequently prepared of cornmeal, thus:

tqá'níl, stirred, is a gruel prepared by stirring cornmeal in boiling water or milk. Cedar ashes are added to the meal. At times this is omitted, when the gruel is designated as *gäd ádin*, no cedar.

tqóshchín, born to water, designates cornmeal mixed in an equal proportion of water; *tqáskhāl*, cracked (corn) with water; *tqánāshgīzh*, mixed with water, a mush of the consistency of mashed potatoes; *adóla*, a very thin gruel (borrowed from the Mexicans).

tqaná'níl, re-stirred, is a mush made of saliva-sweetened parched cornmeal. This is stirred in boiling water and allowed to freeze over night, in which shape it is consumed. It was much relished in the winter months, but is at present little in vogue.

tqó ihī'níl, put in water, is a porridge made of parched corn ground to meal. The water is stirred constantly while adding the meal, and the porridge is eaten after cooling.

tqa beěstłóni, tied three times, is a very stiff mush placed on corn husks, which are then folded and tied in the center and at the ends, and boiled in this shape.

The facility with which gruel was prepared suggested its use for the journey, and accordingly cornmeal was carried along for this purpose.

yist'élgai, the white provision, was prepared by boiling the corn sufficiently to allow the hull to be easily removed by rubbing it on the metate and then grinding the meat to a fine meal. On journeys it could be taken in this shape, or moistened with water.

tśálbaí was a general term for provisions of meal taken on journeys. The corn was parched usually and then ground. At times it was soaked slightly and then ground, adding a pinch of salt to preserve it, in which shape the meal was designated as tśálbaí dakáne, the gray meal provision.

alkhānākā, sweetbread meal, a provision consisting of sun-dried morsels of sweetbread (alkhād) ground to meal.

lēs'á bisgá, sun-dried bread, is still made by some for the journey, though more frequently as a provision for the winter. Morsels of bread-rolls, baked in ashes, are placed on the sunny side of the hogan to evaporate, when they are stored away. In winter they are boiled in water or milk and served as a stew. These provisions for the journey are frequently designated by the general term, tśálbaí, or síst'é', bíst'é', my or his provisions.

tśébānāzhō', shucks between stones, is a griddle cake made by the Zuñi. The mush is spread over corn shucks and then baked between two flat stones over a fire.

Corn also furnished the breadstuff for a variety of preparations. Saliva furnished the glucose inasmuch as a small portion of the meal was chewed previous to mixing it with the batter. When green corn could be had it was parched before grinding and boiled slightly before adding the glucose. Otherwise cedar ashes, and at times salt, furnished the only ingredients. Usually the meal or flour is kneaded to a stiff dough.

alkhád, small cubes, is a corn cake baked in small, underground ovens or pits previously heated and lined with corn husks. The dough is poured over the corn husks and covered with a second layer of them and a light layer of dirt, over which a fire is kept through the night. When thoroughly baked the cake is cut up in small squares. It is required at the vigil of the night chant, and figures also at the nubility ceremony when it is supplied by friends of a poor family.

lēhīlzhōzh, lined up in the ground, is very popular during the harvest. Corn husks, filled with dough and tied at the butt and tip with yuccā, are lined up in a heated trench and covered with dirt and hot coals until thoroughly baked.

næzmázi, round cakes, are made of green corn, and baked on the stone griddle. Milk is now frequently substituted for the water formerly used in preparing the batter.

Corn, and at present also wheat, ground on the metate, in addition to flour bought at the stores, furnish the material for the following:

lēś'án, put in ashes, is bread of the shape of the upper millstone, and is baked in hot embers. lēs'á dotlízhì, blue bread, which has the admixture of cedar ashes; lēs'ālgáí, white bread, without the addition of the ashes; lēs'ā lāni, many breads, which are made in the same manner, in the shape of biscuits, and either with or without the addition of the cedar ashes.

tsē āst'é', baked on the stone, designates the well known paper bread. The batter is spread over the heated stone griddle with the hand and baked.

tsē āst'é' lāgaí, white paper bread, is made of white corn; tsē āst'é' dotlísh, blue paper bread, is nixed with cedar ashes; tsē āst'éltsoi, yellow paper bread, contains saliva-glucose; tsē ēst'é-lchí, red paper bread, is made of blue corn without the cedar ashes.

náneskhādi, slapped again, a griddle cake, owes its name to the manner in which the dough is passed in easy fashion from one hand to the other, and then tossed on the stone griddle to

bake. When the batter is salted they are sometimes designated by *dokózh*i, salted cakes. At times, too, the finger-marks of the operator are distinctly visible on the finished cake, hence the additional name, *nōgázi*, finger-marks. Cedar ashes are frequently added to the batter, especially when made of ground wheat.

hashchēzhīn bináneskhādi, the cakes of the Firegod, are four small round cakes about three inches in diameter and perforated in the center. They are baked for the Firegod, who strings them with yucca and attaches them to his right arm on the ninth day of the night chant, when he begins his slow journey from sunrise to sunset.

*nányēzh*i, which are laid or spread out, is a small cake about the size of a silver dollar, which is offered to the Sun at the wind chant by persons taken ill during an eclipse of the sun. The cake is baked on coals outside the *hogán*, and is offered as a sacrifice in addition to precious stones.

*kíneshbīzh*i, broken braids, are small dumplings made of dough. This is rolled between the hands in slender strips, from which in turn small pieces are broken off and rolled in the shape and to the size of small marbles. These are thoroughly boiled in water, after which they are thrown out and picked up with small sticks and eaten. The customary cedar ashes may be added. *kíneshbīzh*i *dokózh*i are salted dumplings, somewhat larger than the preceding, as the operator works as much dough as she can conveniently knead in one hand; *kíneshbīzh*i *tso*, large dumplings, are made of parched corn ground to meal. In size and shape they resemble an apple, the two dents made at either end adding to the similarity. Saliva-glucose is also added to sweeten them, while they, too, are gathered and held with sticks, and preferably eaten when hot.

nadá sítégo, or *lēshībēzh*, roasted corn, roasting ears, which are placed on the coals and turned occasionally until fairly well colored. *neshjīzh*i, another form of roasting ears, were left in the husks and roasted in a pit (*lēyf' lēshībēzh*) and allowed to

bake until morning, when the corn was shucked (yīlzhō) and eaten.

Breadstuffs were also obtained from seeds, and various food preparations were made of esculent herbs and seed bearing plants. Thus, the seeds of some species of pigweed, tľō'děi, tľō'děiqóshi, tľōdēilbaí, were ground and prepared in precisely the same manner as corn. The glucose, too, was obtained by parching a handful of the seeds and chewing a portion of the seed meal. Another pigweed, tľō'dēintlízi, was usually prepared in the shape of a stiff porridge, tqánashgīsh. The seeds of the pigweed, tľō'děitsó, were washed previous to boiling them. The foam appearing on the surface was removed and fresh water added until no trace of foam was visible. The boiled seeds were then spread out to dry and treated after the manner of corn.

kíneshbízhi, dumplings, lēs'án, rolls, and nāneskhādi, griddle-cakes, were prepared from tľō'tso, tľō'tsósi, tľō'dahikhāli, all species of mountain grass. The seeds of ndídlídi were collected by holding a bunch of the grass over the fire and allowing the seeds to fall at the base of a flat stone placed slantingly against the fireside. Hence the plant derived its name, "that which is scorched."

A stew, bēltsé', was frequently made of wā', bee-weed, tľō'-chīn, wild onions, and hazāālě'. a gamot. These were boiled with a bit of tallow, or morsels of meat, and eaten by dipping bread into them. dzídzétso, dried peaches, and nă'ólí, beans, were also prepared in this fashion.

The leaves and small branchlets of the bee-weed in its early growth were boiled, and after adding a pinch of salt, were served as greens. The remnants of these were allowed to dry, and were cooked in the shape of small dumplings with meat or tallow. The bee-weed was not found serviceable after attaining a considerable height owing to the difficulty in removing its pungent odor.

To obtain the use of the hedge mustard, ostsé', the seeds had to be parched in a pan or skillet. Formerly they were placed

with live coals in a basket and tossed upward until well parched. They were then ground and a soup (ātqō) or stew was prepared from the meal. The iłłfhi, gummy plant, and tsīghájilchī, the dodder, were treated in the same manner, but were used very much like dry cornmeal.

númāsi, the wild potato, which could be found almost anywhere, was baked or boiled. A pinch of dlēsh, almogen, was added to prevent vomiting.

naqōyai, or nahuyai, a tuber, was prepared in the same manner, while the tuberous root of the plentiful chahashtēzhi, a gamot, was peeled, baked and ground, as an occasional substitute for cornmeal. altsini, which resembles the wild potato, was eaten green.

jiltōi, which is sucked, was baked and the pith sucked from the stalk. Hence its name.

The fruit of the broad-leaved yucca, tsázî ntqēli, is used to much advantage. When fairly ripened it is baked in hot coals, but when the seeds have fallen out the flower or fruit is placed on a large, flat stone, over a fire, and dried. After that it is ground and the meal is kneaded into the shape of small puffs, which, in turn, are slightly roasted on the stone. This done, small pieces are broken off and laid in the sun, allowing them to evaporate until practically every trace of moisture has disappeared. They are then sprinkled with water and worked into roll-cakes of various sizes. Finally, a stick is forced through the entire length of the cake, which later is removed, leaving an opening to prevent the cake from souring. As much time and labor is required to obtain the fruit in this form, many families journey to districts in which the plant is abundant, spending often as much as ten and fourteen days in the field. The finished cakes are often stored for winter. Small pieces are then broken up and mixed with water, making a thick gravy or syrup of it, which is eaten with bread, meat and other dishes. The yucca fruit or flour is designated as hashkân, the dried jellycake as nesdūg.

qōsh, the pitahaya, or prickly pear, is gathered by means of cactus pickers, qōsh bewōbēhe, or a forked stick. The thorns are removed by rubbing the fruit in the sand with the foot, after which it is cut into and sun-dried. It is usually served as a stew, bēēltsē', like dried peaches. nayīzi, or nayīzilchf, the squash or pumpkin, is boiled and mashed to a stew. They are also cut into strips, which are baked on coals in the usual fashion, or they may be evaporated and stored for winter. nā'ōli, beans of various kinds, are usually boiled.



Cactus Picker.

With some few exceptions native berries, fruits and nuts were not especially prepared but eaten when picked. Thus, chū', or chō, the wild rose; kīnjīl'āhi, the currant; dzīdzē, the choke cherry; dzīdzē', unidentified; dzīdzē di'ōdi, the service berry; dzīdzē dokōzhi, the wild cherry; dā'whōsh, the raspberry; dīnās, unidentified; chīlnā'āt'fōi, the wild grape; dā'neskhāni, sugar melon; t'ēchīyá, green food, the watermelon; qā'ālsēdi, the walnut.

dzīdzētso, the peach, is boiled or sun-dried; chīlchīn, the sumac berry, is dried, ground and boiled, as also jīlqāzhi, the hackberry; hōchā' and lichfī, unidentified berries, were boiled and served as a gruel.

chēcchīl binā, acorns, were boiled like beans, or roasted on coals; neshchf, the piñon nut, is roasted in skillets or pots, and sometimes mashed, making a kind of butter called ātlīsh.

After the introduction of sheep, horses and cattle, and more especially after the Navaho had settled down to a pastoral and peaceful life, mutton and beef contributed to their regular bill of fare, while horseflesh, too, was occasionally eaten. These are prepared in various ways.

The meat is at times boiled, ats' shibēzh, and the soup, ātqō, is eaten with a spoon or soaked up with bread. hanīgaf (hanīgá, meaning, probably, the dawn rises upon it), is a stew consisting

of whole corn and meat in a lump, which is boiled sufficiently to allow the meat to peel from the bone. It is kept boiling for about the space of a night.

Meat is also roasted and fried. *tsĩnbesit'ěgo*, roasted on a stick. The meat is pierced with a long stick and held some distance over live coals, allowing it to roast slowly. When well done a little salt is sprinkled over it, and the burnt portions are removed with a knife. *tsĩd bakhã sit'ěgo*, roasted on coals, is the roast placed directly upon live coals; *lěshibězh*, when the meat is placed on the fireplace and covered with live coals. The roasts are flavored with salt after baking. Prairie dogs are usually fried in this manner. After removing the entrails of the dog, the interior is sprinkled with salt and closed. It is then thrown on the fire and covered with embers, after which the hair is removed with a knife, and the dog is salted and eaten. *ásã nasdzĩd*, mixed in the pot, designates morsels of meat fried in a pot.

To preserve the meat in the hot summer months it is frequently jerked, *alkĩnĩlgĩsh*, (sliced and stretched). The meat is cut in thin slices, which are well stretched and then hung on a line to cure and dry. This gives the meat a hard rind, impenetrable to the sting of flies, and may be kept indefinitely. In order to render it pliable again the jerked meat is placed on live coals for a few minutes, then sprinkled with water and pounded with a stone. It is now usually fried in lard until thoroughly permeated with it. It may also be cut up and fried in lard, and is then allowed to cool off and carried in traveling. This is known as *áchũ*.

Meat is also prepared in the shape of sausage. Thus, *náshgõsh* designates a sausage made of chopped meat with which the entrails of a sheep or cow are filled and boiled in water. Blood, too, is at times thoroughly mixed with tallow and the entrails filled with it. This is then either boiled in water, *dĩl shibězh*, or roasted on hot coals, *dĩl lěshibězh*.

Lard is sometimes obtained from melted tallow and preserved

in paunches, aká' dolyí, melted tallow. The liver, azíd, is usually cut open and baked on live coals, and is then eaten with a slice of roasted mutton tallow. Now and then the head of a sheep is baked on coals and the brains, eyes and tongue are then eaten, a dish known as atsf' lēshibēzh, meat roasted in embers. The paunch is at times used in the preparation of a soup made of crushed tallow. When thoroughly boiled the paunch is cut open and the soup is eaten by dipping bread or morsels of tallow into it. Formerly a glucose was added in the shape of chewed tallow, which accounts for the name still in vogue, aká' ābíd bīdotāl, tallow-glucose in the paunch. Tallow is also mentioned in other preparations, thus achí bikídesdiz, twisted with entrails, consisting of a piece of tallow wound with entrails and roasted on the coals; akhági aká' bīntīgo, tallow in the hide, is similar to this. By applying warm water to the sheep hide shortly after the slaughter the wool is easily removed, after which the hide is cut into strips which are then wound around a folded piece of tallow and roasted on coals. When done it is cut into slices like roll-cake.

Venison, such as of deer and antelope, is prepared in precisely the same manner as mutton and beef. The meat of the cottontail, gǎ', and the jackrabbit, gǎ'tso, is either baked or boiled. The turtle-dove, hasbīdi, is plucked and the entrails are removed after which it is baked on coals or fried on the stick, and a little salt added to flavor it. The yellow-bird, tsídiłtsoi, the snow-bird, jádidlú, and the bluebird, dóli, are prepared in a similar manner. The Navaho also eat wild turkey, tqázhi, and at present even ducks, nāl'éhi, to which formerly many objected. Such as are cognizant of the rites of eagle trapping, (atsá aqf'nili æhósini), also partake of the flesh of various eagles and hawks, atsá, atséłtsoi, gíni, ginitso, etc., though the ordinary Navaho taboos (bahádzíd) them. The crow, gáge, the dog, lechāi, and the coyote, má'i, to which the Zuñi and Hopi do not object, are not touched by the Navaho because of the habits of these animals of feeding upon human flesh, (diné iyáni). No such objection

however, was felt to the flesh of the bear, *shāsh*, the mountain lion, *nashdūitso*, the wildcat, *nashdūilbaï*, or the wolf, *mâ'itso*. In the earlier days, too, such animals as the rat, *lætso*, the porcupine, *dasáni*, and the badger, *nahashchíd*, were frequently eaten. The usual method of preparing them was to boil or bake the venison on live coals. The meal of bear meat must be preceded by a sacrifice to the bear. Porcupine was preferred to badger, and was prepared much in the same manner as the prairie dog. After scorching the quills the entrails were removed and the interior sprinkled with salt. The animal was then covered with piñon boughs over which a huge fire was kept. Some surrounded the fire by a stone wall to insure the proper heat.

The flesh of the horse, *kī*, of the mule, *dzānæz*, and of the burro, *tqéli*, is considered the equal of turkey meat (*tqázhi daāqihalní bitsí'*, meat just as sweet as the turkey). At present horseflesh is still eaten, while the burro and mule are rarely touched.

Of the water fowl and animals, the duck has already been mentioned. The otter, *tqábaästqīn*, and the beaver, *chā*, alone were permissible, which was true also of the turtle, *tsístqēl*, *chædagháí*. While at present many do not object to canned fish, the more conservative still hold that fish and water fowls should not be touched in any shape or form.

Withal, the abundance of mutton and beef have practically excluded all other kinds of meat, while the facility with which flour and bread and a large assortment of canned goods may be purchased, has at present limited the various native dishes to a comparative few.

WORDS.

nadá, corn; *nadá bitá*, corn leaf; *dáātā*, corn husk; *nestá*, ripe; *ntá* (*nestá*, *dīno'tfī*), it ripens.

nadá yishqīzh (*yfyīzh*, *deshqīsh*), I pluck corn; *nadá yishdlād* (*yīdlād*, *deshdlāl*), I tear the ear from the stock; *nadá bēshdlād*

(bēldlād, bīdeshdlāl), I husk corn; or nadā yishó (yíshō, deshó), I shuck the corn.

nadā yishká' (yíkâ, deshkal), I grind corn; chīl binā yishká', I grind seeds; akān, flour, meal, cornmeal.

nadā tqāōshnī (tqaisēnī, tqāideshni), or tqā'osh'nī (tqā'isēnī, tqā'ideshni), I knead dough; gād, cedar, juniper; gād ādin, without cedar; tēshchīf, or lēshchīf, cedar ashes.

bī'ndōšāl, saliva-glucose; idītāl, it is chewed and added to it; bi'lēl'fni, baking powder.

nadā yishbēzh (shēlbēzh, deshbīsh), I boil corn; nadā yistēs (sēltē', destīs), I roast corn.

tqōshchfn ishlē (íshla, adeshlīl), I prepare a stiff mush. With few exceptions ishlē is used for preparing food: tqaná'nīl ishlē, I make frozen mush; tqābeestlōni ishlē, I bake corn in husks.

tqā'ash'nīl (tqā'ash'nīl, tqāadesh'nīl), I mix with water; tqā'nīl, gruel; porridge.

tqana'āshgīzh (tqā'nshēgīzh, tqā'ndeshgīsh), I make a stiff mush (cut the water [?]); tqānāshgīzh, a stiff mush.

tqó ihīsh'nīl (tqó ihf'nīl, tqó idesh'nīl), I stir in water; tqó ihī'nīl, a porridge.

bā yishkhād (yishkhād, deshkhīl), I eat bread; or, lēhilzhōzh yishkhād, I eat baked corn-bread; nāneskhādi yishkhād, I eat griddle cakes; lēs'ān yishkhād, I eat roll-cakes; dīl yishkhād, I eat blood sausage; belasāna yishkhād, I eat an apple.

kfneshbīzhi yishdēl (yishdēl, deshdlī), I eat dumplings; dzi-dzētso yishdēl, I eat (a number of) peaches.

tqā'nīl yistšē' (yíltšē', destšā'), I eat mush or porridge; bēēltšē' istšē', I eat a stew, of which there are various kinds: wā' bēēltšē', a bee-weed stew; tīōchīn bēēltšē', onion stew; dzīdzētso bēēltšē', peach stew; or, dzīdzētso istšē', I eat peaches stewed; hazāālē' bēēltšē', a gamot stew; nā'ōli bēēltšē', a bean stew.

nadā yish'āl (yīāl, desh'āl), I eat roasting ears.

ātqó yishdlā (yishdlā, deshdlī), I eat (drink) soup.

atsf' yishghāl (yishghāl, deshghāl), I eat meat of any kind.

debé bitsf', mutton; bégāshi bitsf', beef; hī bitsf', horseflesh; tqāzhi bitsf', turkey meat; shāsh bitsf', bear meat; jádi bitsf', antelope meat; gǎ' bitsf', rabbit meat, and so on with any kind of venison.

shā nínīl, evaporated, dried in the sun; shā nīnīshnīl (shā nīnīl, or shā nínīl, shā ndeshnīl), I place it on the sunny side.

tl'ō', a grass; chīl, a plant; chīl binā, or chīl bīlastsī', seeds; chīl binā nanshdé (nanīldé', dīneshdā'), I shake out seeds, tsīn, or bitsīn, its stalk; bitsīn, its pith.

yīnshbē' (yībī, yideshbēl, or yideshbīl), I gather, pick fruit; dzidzētso yīnshbē', I pick peaches; chīl binā yīnshbē', I gather seeds; hashkán yīnshbē', I gather yucca fruit; qōsh yīnshbē', or qōsh whōshbē' (yībī, yidēshbēl), I pick cactus; qōsh bewōbēhe, cactus pickers.

nēsdūg, dried yucca syrup; jinīdūg, it is pressed in a heap; nīshdūg (néldūg, dīneshdō'), I make a heap of it with my hands.

atsf' alķīnīshgesh (alķīnīlgīzh, alķīdīnēshgīsh), I slice and stretch, I jerk meat; alķīnīlgīsh bānāstī', a line of jerked meat; alķīnīlgīsh bānaāshtī' (bansēltī', bandēshtī'), I hang jerked meat on a line; alķīnīlgīsh sagán, the jerked meat is dried; atsf' ītséd alķá' bīnāsnīl, jerked meat pounded and fried in lard; āchú, cooled fried jerked meat.

āsā na'āsīd (nsézīd, ndēsīl), I mix morsels in a pot.

atsf' yīshbēzh, I boil meat; atsf' yīstēs, I roast or boil meat.

COMMERCIAL ARTICLES

ba, bread; ba dākhāi, square bread, crackers; ba lakhānigi, cake; basdél (Sp.), pie; mandegīa (Sp.), butter; gēso (Sp.), or abé' nesķī', cheese.

yādīzīni, which stands erect, canned goods, a tin can; belasāna (Sp.), apple; bitsē hulōni, or belasāna bitsē hulōni, the apple with a tail, canned pears; dzidzētso, canned peaches; chīlnā'ātłōi, canned grapes; chīlnā'ātłōitso, prunes; hashkán, figs, dates; dzidzē dokōzhi, apricots.

chīl, lettuce, or any unknown vegetable; chīl laǵáigi, cabbage, cauliflower; chīl lichfigi, a tomato, radish, beet; chīl lītso lakhān-iri, an orange; chīl lītso dokózhigi, a lemon.

nūmasitso, a potato; nūmasitso lakhānigi, a sweet potato.

dākáz lakhānigi, or akház lakhāni, sugar cane, syrup.

alós, (Sp.), rice.

nā'óli numázi ri, peas.

alkésdisi, candy; alkésdis (alkiséldiz, alkídesdis), I twist it.

áshî, salt; áshîlakhān, sugar; azē díchî, pepper.

BEVERAGES

tqǒlbaí (tqǒlbáhi), grayish water, is a native intoxicant brewed from corn, and probably of Chiricahua-Apache introduction. Matured or slightly matured corn is buried until it begins to sprout, after which it is ground to a very fine meal. To this herbs are added with water, and the mixture is then boiled for four or five days, after which it is put aside again to cool off. Fermentation soon sets in, and the sediment of corn and herb mixture collects at the bottom of the kettle, while the gray fluid, tqǒlbaí, is gathered from the surface for drink. It is said to be very intoxicating, and was brewed in the fall and spring of the year.

Owing to the facility, however, in obtaining whiskey at close range and less expense and labor, the native beverage is rarely made at present. In addition, the Navaho are very fond of whiskey, and purchase it almost at any price, especially at their public dances, where women usually carry on a lively traffic. Ordinarily a drunken person is not abused or molested, and no disgrace seems to attach to habitual drunkenness. Beer, wine and cider are not despised, while soda pops are in some demand.

Coffee and tea, with sugar and goat milk, are served at every meal.

tqǒ, water; ashdlá (eshdlá, adeshdlí), I take a drink; yishdlá (yishdlá, deshdlí), I drink it; shānákha, or shaúizid, give me a

drink; nānshkhá (nānákhat, nādeskhát), I give you a drink; nā'nsfd (nā'nízd, nā'desí), I pour it out for you.

tqōlbaí, corn whiskey; nadá dīnségo, sprouting corn.

nnēlāghāsh (nānēlāghāzh, or nnēlāghāzh, ndīnōlāghūsh), it ferments.

tqōdīlqīl, dark water, whiskey; tqōdīlqīl, or tqōlbaí yishdlá, I drink whiskey, or corn whiskey; tqōdīlqīl altqahídzid, a cocktail; tqōdīlqīl altqansfd (altqañzid, altqādesí), I mix a cocktail.

tsí'deyá, or tqōdīlqīl (tqōlbaí), ye tsí'deyá, he is drunk with whiskey.

jōdlá, or odlá, he drank too much, he is drunk; shīl nāhōdeyá. I am dizzy from the effects of drink.

nāshkhūi (nsékhūi, ndeshkhō), I vomit.

yoādish'á (yoādf'á, yōādīdes'á), I put it aside, I quit drinking.

koqj'é (koqwé, kofwé), coffee; chīl koqyéhe, or dě (Sp.), tea; abé', milk; bizhé hulóni, beer; chīlnā'āt'lōi bitqō, wine; belasāna bitqō, cider; dīlchōshi, or tqō dīlchōshi, water which pops, soda pop; tqōzīs, a bottle.

COOKING UTENSILS

Cooking utensils were very meagre owing to the nomadic and predatory life of the Navaho. Ovens were not in use, excepting the underground oven mentioned previously, for baking corn. In modern times ovens, similar to those in use among the Pueblos, have been introduced for baking purposes. Mush and stews were boiled in earthen bowls, and gourds or earthen spoons of convenient size were used as dippers. The mush or stew was stirred by means of slender sticks made of black greasewood (duwúzhishzhfn), and in odd numbers, from one to eleven, some preferring the larger number to the lesser for convenience.



Cooking Pot.

Corn was ground on the millstone, consisting of a large, flat stone, upon which the corn was rubbed and ground by means of a smaller, slightly rounded stone of oblong shape. At present the millstone is used for grinding corn, and at times also for coffee, though coffee-mills are purchased at a very moderate cost. A flat stone is still largely used as a griddle for frying cakes and paper bread, though much bread is also bought, and modern pans, pots and skillets, too, are quite general.

Dishes, in the shape of plates, knives and forks, are not considered indispensable, and the old custom of eating from a pan or bowl, and using the fingers, is even at present not objected to. Two or three will also share in a single cup of coffee when cups are not plentiful. Gourds, earthen cups, burnt out pine warts, or a worn and hollowed millstone chipped down to a convenient size, furnished fairly convenient drinking vessels, all of which have long since been displaced by china and tinware.

khûké' (khûnfkê'), the fireplace.

tsédashjē, the metate, lower millstone; tsédashchīni, the upper millstone.

āsā', the cooking pot; tsétēs, the stone griddle.

hashtlīsh lētšā', earthen bowl.

hashtlīsh adē, an earthen spoon; adē, the gourd dipper; tsīn bizēs, pine wart; beēlkā, cup made of the worn millstone; bē'idlāni, a drinking vessel; beqa'fzhāhi, a cup.

adéstsin, the stirring sticks.



Stirring Sticks.

bēs'ēsā', a pot, pail, bucket; bēsh bēibēzhe, or bidā hulōni, a coffee-pot; bitsē hulōni, a skillet or griddle; beshbīkhū'i, a stove; lētšā', a plate, saucer; besh, a knife; bilātqāi, a fork; bēsh'idē, a spoon.

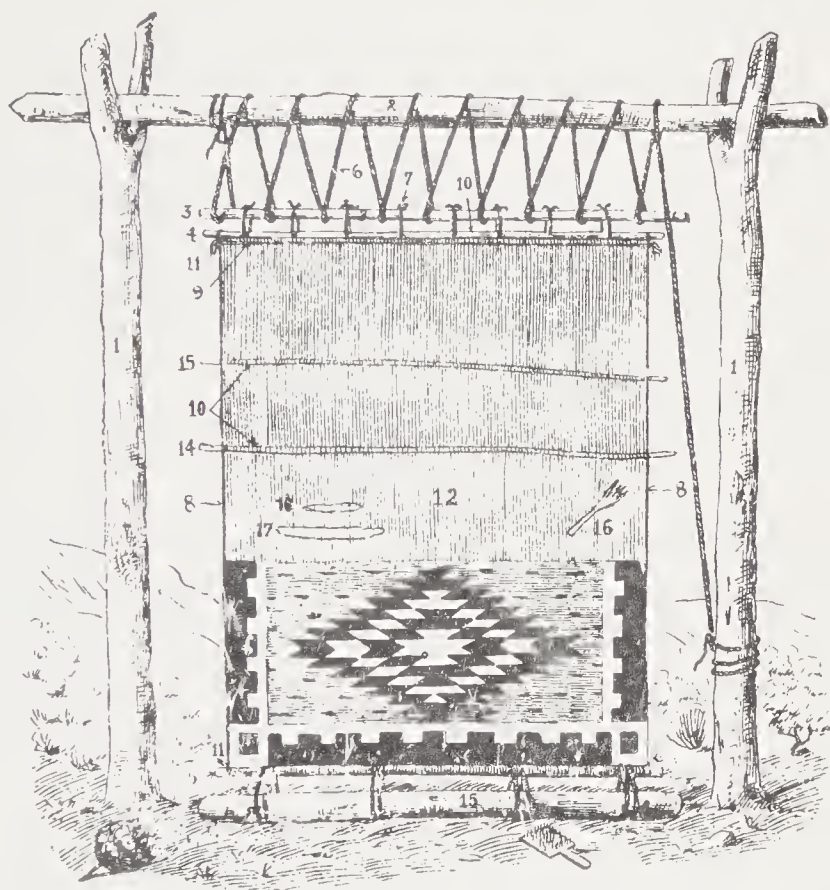
SAYING GRACE

Meals are still served on the floor of the hogan. In the early days the meal was preceded by grace, which was said by the head of the family. The stirring sticks were removed and cleaned, and an invocation made while holding the sticks upward. This was considered indispensable at a time when the Navaho relied completely upon the yield of corn and herbs, whereas at present every one should be in a position to provide for his own without the assistance of the Unseen. The custom, however, has not entirely subsided.

adéstsīn, the stirring sticks; sōdiszīn (sōdǎezīn, sōdideszīn), I say grace, pray.

koqyé shibézh, the coffee is boiled, the meal is ready.

Arts and Industries



WEAVING

Weaving has been carried to a high degree of perfection by the Navaho. The art as it exists among them to-day is not an invention of their own, as nothing similar is found among any other tribe of the Athapascan stock. It is pretty safe to say that the Navaho learned the art of weaving from the Pueblos.

Their own legends, however, account for it in their own way. The *hanełnéhekě hanf'*, or moving upward chant legend, records that the art of weaving was taught by the Spider Man and Spider Woman in the following manner.

"The Spider Man drew some cotton (*ndaká'*) from his side and instructed the Navaho to make a loom. The cotton-warp was made of spider-web (*nashjéi bitłól*). The upper cross-pole was called *yábitłól* (sky or upper cord), the lower cross-pole *nł'bitłól* (earth or lower cord). The warp-sticks were made of *shábitłól* (sun rays), the upper strings, fastening the warp to the pole, of *atsínltłish* (lightning), the lower strings of *shábitłájlchī* (sun halo), the heald was a *tsághadĩndĩni ísēnīl* (rock crystal heald), the cord-heald stick was made of *atsólāghāl* (sheet lightning), and was secured to the warp strands by means of *nłtsátłól* *bilłdestłó'* (rain ray cords).

"The batten-stick was also made of *shábitłájlchī* (sun halo), while the *bēidzói* (comb) was of *yólgaí* (white shell). Four spindles or distaffs were added to this, the disks of which were of cannel-coal, turquoise, abalone and white bead, respectively, and the spindle-sticks of *atsínltłish* (zigzag lightning), *hájlǵish* (flash lightning), *atsólāghāl* (sheet lightning), and *nłtsátłól* (rain ray), respectively.

"The dark, blue, yellow and white winds quickened the spindles (*beedłzi*) according to their color, and enabled them to travel around the world."

Presumably, this legend accounts for the now vanishing tradition that weaving should be done with proper moderation. Overdone weaving (*akéłtló*) is ameliorated by a sacrifice offered to the spindle (*beedłzi*). Its prayerstick (*biket'án*) consists of yucca, precious stones, bird and turkey feathers, tassels of grass (*tló'zól*) and pollen, and forms part of the blessing rite (*hozhoji*). The *hacheyatqéi*, or *chäyatqéi* (prayer to the gods), is recited with the sacrifice. The custom withholding maidens from weaving before marriage, which was formerly observed, is also explained by the fear of overdoing weaving. Little

or no attention, however, is paid to this tradition to-day.

In 1849 Lient Jas H Simpson had this to say about the Navaho blanket: "It seems anomalous to me that a nation living in such miserably constructed mud lodges should, at the same time, be capable of making probably the best blanket in the world." He then quotes the words of Gregg on the same subject: "They (the Navahos) now also manufacture a singular species of blanket, known as the Serape Navaho, which is of so close and dense a texture that it will frequently hold water, almost equal to gum elastic cloth. It is, therefore, highly prized for protection against the rains. Some of the finer qualities are often sold among the Mexicans as high as fifty or sixty dollars each." And in the Indian Commissioner's Report of 1854 we read: "They (the Navahos) are the manufacturers of a superb quality of blankets that are waterproof, as well as of coarser woollens."

These quotations show that more than sixty years ago the Navaho blanket was an object whose quality and artistic execution excited the attention and appealed to the æsthetic tastes of cultured and educated men. Nor is the modern Navaho blanket behind its predecessors of sixty or seventy years ago, but has rather improved since then, although its reputation has suffered a little in late years by coarse, inferior work, made to sell, and by the introduction of strange, sometimes hideous colors. However, blankets of that kind are not and never have been the rule, and wherever traders and buyers refuse them, and insist upon getting good ones, poor blankets are seldom found. The Navaho is a trader by nature and instinct, and if he sees that he can get an equally good price for an inferior and poor article, as he can for one upon which he has expended much care, time and labor, he will do just about what his palefaced brother would do.

But, despite all this, the Navaho blanket to-day is the only thing of the kind in the world. No other people, white, red, black, brown or yellow turn out a textile fabric that can be placed beside it. It is true, oriental rugs are woven in much

richer patterns than the Navaho blanket, but, while the former bewilder the eye by their over-rich and over-crowded designs, the latter, by their very barbaric simplicity of design and well chosen colors, please and rest the eye at the same time.

In the following paragraphs an attempt is made to describe the making of the Navaho blanket in all its details.

SORTING THE WOOL.—After shearing, the wool is carefully sorted. All coarse and long-haired wool is put aside to be used for the warp-strands. The less coarse wool is then separated from the very fine or very short-haired. The latter is not used for weaving, but is sold or used otherwise. If any burs be in the wool, as is often the case, they are picked out while sorting.

āghā altsādashjōl (altsādashēljōl, altsādashjōl), I sort (separate) wool.

āghā altsā nādashjōl, I resort the wool, or sort the wool again.

tqanātsēhi āghā bawoshbé (bayfbi bayideshbél), I pick burs out of the wool.

āghā dīchīzh, coarse wool; āghā ilzhóli, less coarse wool; āghā zaf, very fine, short wool.

WASHING.—The wool, having been sorted, is spread upon a slanting rock. Water, into which soap or yucca root has been put, is brought to boil, and poured while hot upon the wool. This is repeated until the wool is thought to be clean. The hot water takes the dust, sand and grease out of the wool, and running from the slanting stone, carries it off. The wool is then allowed to dry in the sun, either on the slanting rock, or spread over bushes. If it is not considered clean enough the washing process may be repeated. Owing to the scarcity of water, and the rarity of sheep dips, and to the fact that the sheep are never kept under cover, but always in the open, the wool, as a rule, when taken from the sheep is not very clean, and may require more than one washing. The washing of the wool is very seldom neglected, since unwashed wool will not take the dye readily,

and if the blanket is woven in natural colors it can not be easily sold or disposed of if the wool is still dirty or greasy. In washing wool the saponaceous root of the yucca plant is preferred to soap, and since there are no greasy or fatty substances in it, it is said or believed to have a greater cleansing power.

In the last few years the Government has established sheep dips in various places on the Navaho reservation, which greatly aid in keeping the sheep clean, as the Indians are compelled to dip their sheep at certain seasons.

ǎghá yisgīs (sǎegīs, desgīs), I wash the wool.

ǎghá naneisgīs (nasǎegīs, nadesgīs). I wash the wool again.

ǎghá chqīn (bichqīn) děya, dirty wool.

ǎghá aká' děya, greasy wool; ǎghá hashtl'ish děya, muddy wool; ǎghá lēsh děya, dusty, dirty wool; ǎghá saī děya, sandy wool; ǎghá tlō' děya, wool full of hay; ǎghá tqō děya, wool full of water, wet; ǎghá tqanǎtsēhi děya, wool full of burs.

ǎghá nastsá (nǎltsaī, nǎdestsī), I dry the wool.

ǎghá nanastsá (nǎnǎltsaī, nnǎdestsī), I dry the wool again.

ǎghá yiltsaī, dried wool.

nǎdishbǎl (nǎdēlbāl, nǎdideshbǎl), I spread it (over bushes).

debē tqanágis. a sheep dip.

debē tqanǎsgis (tqǎnsǎegīs, tqǎndesgīs), I dip sheep.

CARDING.—After the wool has been washed and become dry it is gathered up and put into a sack. When a woman has made up her mind to weave a blanket she takes the wool out of the sack, a handful at a time, and begins to loosen it up by pulling it apart with the fingers, as the water has caused it to become matted in places. Each handful is then placed between two wool-cards, with which the wool is combed from one card to the other, until the hair all lie in one direction. These wool-cards are of modern construction, can be bought at the stores, and consist of a thin rectangular piece of wood, about four by seven inches in size. On one side a short wooden handle is attached, while the other side is covered with leather con-

taining fine wire teeth. They look something like a large, square hairbrush, with the handle attached to the back and sticking out on the side.

āghá āzís biyishjól (biyíljól, bideshjól), I put wool into the sack; āghá āzís qāhastsód (qāhātsód, qāhidestsól), I take wool out of sack (small quantity); āghá āzís qāhashjól (qāháljól, qāhideshjól), I take wool out of sack (large quantity).

nadestši (nadíłtsi, nadidésti), I pull (pinch) apart.

béqanılchādi, wool-card.

āghá qānıshchād (qānılchād, qādıfeshchāl), I card (loosen) wool; āghá qānánıshchād (qānanılchād, qānadıfeshchāl), I card the wool again; āghá qānolchād, carded wool.

āghá danıjól, or danımas, matted wool.

SPINNING.—Now comes the spinning. Spinning in Navaho style is a long and tedious piece of work. Although the spinning wheel was introduced and used at an early date by the Mexicans of the southwest, and although the Navaho had often seen them use it, and had plenty of occasion of buying, constructing or of acquiring spinning wheels, yet their imitative inclination did not assert itself in this particular point, but they preferred and held on to the tedious, tiresome distaff of the old Pueblos.

This distaff or spindle consists of a smooth round stick, about two feet in length, pointed at both ends, and of a whorl, a small, round, flat disk of wood about four or five inches in diameter, with a small hole in the center. The stick is passed through this hole and the whorl is securely fastened about five or six inches from the butt end of the stick. The stick of the distaff is usually made of a twig of *Kinjıl'áhi* (currant), although any other stick or twig of hard wood may answer; the whorl is made of any kind of tsın nēheshjı (board or lumber).

The woman does her spinning, as also all her other work which does not necessarily require a standing position, sitting, or rather squatted Turk fashion or tailor style, upon the ground.

In spinning, she takes the distaff in her right hand and a piece of the carded wool in her left. The top end or tip of the distaff is stuck into the wool, and with a few turns it catches fast in it. By pulling and working the wool with the fingers of the left hand it is stretched out into a long strand; at the same time the distaff is twirled with the fingers of the right hand. The distaff rests during this operation with its butt or lower end upon the ground and is in a straight line, or nearly so, with the strand of wool. After the bunch of wool has been lengthened and straightened out, or the strand has reached the length of the woman's arm, the distaff is brought into an acute angle with the strand, and while the woman keeps on turning it, she winds the strand up and down upon the stick. This is repeated until the stick becomes quite bulky, when the wool is unwound from the stick, wrapped into balls, and put aside. This process is repeated as long as the wool lasts, or until the woman thinks she has enough.

For ordinary blanket purposes the wool is usually spun three times. After the first spinning a thick, loose, fluffy strand is obtained. This is not in a shape to be used for weaving, and is therefor spun a second time, when a pretty loose but firm strand, about as thick as a little finger is produced; this is the woof yarn. Another spinning gives a tight, strong, bristly cord about as thick as ordinary binding twine; this is used for the warp. Of course the quantity of yarn depends upon the size of the blanket the woman intends to weave, also upon the firmness and compactness of the blanket, which may make still another spinning necessary.

asdíz (ăsădíz, ádesdís), I spin.

ăghá yisdíz (sădíz, desdís), I spin wool; na'ăsdíz (na'ăsădíz, ná'adesdís), I spin again, respin; ăghá nasdíz (năsădíz, nádesdís), I respin wool.

beďfízi, distaff or spindle (with which one twirls or twists).

beďfízi bitsín, handle or stick of the distaff.

ăghá qahasdíz, loosely spun yarn (after the first spinning).

qahasdīs (qahádīz, qáhidesdīs), I twirl or twist out (refers to the first spinning); āghā qā'īsdīs (qayāédīz, qādiyesdīs), I spin or twist out wool (refers to the first spinning).

āghā qahastsōd, tightly spun yarn (after the second spinning).

qahastsōd (qaháłtsōd, qāhidéstōł), or āghā qa'īstsōd (qayéłtsōd. qādiyéstsōł), I stretch the wool out (refers to the second spinning).

āghā nānolzhē, warp yarn (after the third spinning).

āghā nīsmās (nésmās, dīnesmās), I wind wool into a ball.

āghā nłmās, a ball of wool.

nānolzhē yisdīz, I spin the warp.

COLORS AND DYES.—After spinning the wool is either left in its natural color or dyed any desired color. Sometimes the wool is dyed before spinning, but, as a rule, it is first spun and then dyed. Undyed wool is distinguished according to its natural color, into black, white, gray, etc.

Dyes are of two kinds, native and artificial. Owing to the very elaborate and careful process in preparing some of the Navaho dyes, American dyes have been introduced, and are at present used almost exclusively in blankets made for the American trade, while for their own use many insist upon blankets woven of native colored wool. Since many colors of modern invention were unknown to the Indians, they had no idea of putting them harmoniously together with their known colors, in consequence of which one sometimes sees blankets which have been fittingly designated by some writers as hideous.

The following is a list of colored wool and dyes.

āghā al'ā at'ēli, all kinds of wool.

āghā lāgał, or agháłgał, white wool; debé lāgał bāghā, or debéłgał bāghā, white sheep's wool; āghā lizhíni, black wool; debé lizhíni bāghā, black sheep's wool; āghā lābá'i, or agháłbá'i, gray wool; debé lābá'i bāghā, or debéłbá'i bāghā, gray sheep's wool.

āghā lichí, or āgháłchí, red wool, dark wool with a reddish tinge; debé lichí bēghā, or debéłchí bāghā, red sheep's wool.

āghā dotłfzhi, blue wool, a mixture of black and white.

bēilchfhi, red dye, with which it is made red.

bēiltsóí, yellow dye, with which it is made yellow.

bēiljfi, black dye, with which it is made black.

bēēditłfzhi, blue dye, with which it is made blue.

dinilchfigi, reddish, or red-brown color, also used for brown, and sometimes even for orange.

dinilchf bēilchfhi, reddish, red-brown (brown or orange) dye.

tqátlid nahalñigi, green color, which resembles water scum.

tqátlid nahalñi bēēditłfzhi, green dye.

tsēdídē nahalñigi, purple, which resembles a tsēdídē, or four-o'clock; tsēdídē nahalñi bēilchfhi, purple dye.

tsīn beyilchf nahalñigi, a deep, dark red color, which resembles the tsīn beyilchf, a plant from which a deep, rich (ox-blood) red color is obtained; tsīn beyilchf bēilchfhi, deep, dark red dye.

debēlchī nahalñigi, like red-brown sheep.

debēlbá'i nahalñigi, like gray sheep.

tsītłól nahalñigi, or bēēditłfsh, indigo; bēēditłfzhi hzhñigi, navy blue; debē lichf nahalñi bēilchfhi, reddish-brown dye.

There are no special names for the analine or other artificial dyes, if a distinction is necessary this would be expressed by prefixing the word belāgāna, American.

DYEING OF THE WOOL.—For making native dyes the Navaho dyer needs the vegetable and mineral ingredients required for the specific dyes; a pot in which to make the decoction of barks, flowers, twigs or roots, for which their own native pots are preferred, probably because the acid of the mordants will not act chemically upon earthen vessels as it will upon tin or iron; a skillet, or frying pan, to prepare certain of the ingredients, and a few thin, slender sticks to immerse the wool with, or take it out of the dye, and to spread it out to dry.

Each dye consists of at least two ingredients, a coloring matter and a mordant. usually some acid substance to fix the color fast.

BLACK.—To make this dye the twigs, with leaves and berries of tsfchîn, or kî, are gathered and crumpled together into small bunches. A pot of water is put over the fire and as many of the bunches as possible crowded into it. This is brought to boil and allowed to continue so for from five to six, or more hours, when a strong decoction is obtained.

While the twigs, leaves and berries are boiling some piñon gum (jě) is put into a skillet and allowed to melt over a slow fire. When melted it is strained to remove dirt and other impurities, replaced in the skillet, and brought to a high degree of heat. Then some native ochre (tsékhô), which has been powdered between two stones, and roasted to a light brown color, is slowly added to the hot gum. The pasty mass which results from this mixture must be constantly stirred since it will be spoiled if allowed to burn. Great care must also be taken that the mass does not catch fire since the piñon gum or pitch is inflammable, for that would spoil the whole mass, and the work would have to be begun anew. While thus seething and being stirred over the fire the pasty mass gradually yields up its moisture, becomes dryer and dryer, until finally a fine black powder remains. This powder, after cooling off somewhat, is thrown into the decoction of sumac, with which it readily combines, and forms a rich blue-black fluid. This continues to boil for about a half-hour when the wool is immersed in it, allowed to boil a short time, and then taken out. The color produced by this dye is a jet black, and is still used for dyeing yarn, buckskin, and women's dresses. It is a very fast color and never fades. Dr Matthews says of this dye that it is "essentially an ink, the tannic acid of the sumac combining with the sesquioxide of iron in the roasted ochre, the whole being enriched by the carbon of the calcined gum."

YELLOW.—The flowering tops of kîtsöi, golden rod, *Bigelovia*, of which several species grow in the Navaho country, are boiled in water for about six hours, until a decoction of a deep

yellow is produced. When the dyer thinks the decoction is strong enough she heats over a fire, in a pan or earthen vessel, some native alnogen called tsě dokózh, saline rock, a kind of native alum or rock salt, until it is reduced to a somewhat pasty consistency. This she adds from time to time to the decoction, and then puts the wool in the dye to boil. Ever and anon she inspects the wool, until in about one half-hour from the time it was first immersed, it is seen to have assumed the proper color. The tint produced is nearly that of lemon color.

Another process of making a yellow is a decoction of the root of a plant called chāt'ini, or jāt'ini, with tsě dokózh, native alum or salt rock. chāt'ini is a plant, or rather a weed, belonging to the *Pogonaceae*, or *buckwheat family*, of the species *Rumer*, commonly called dock or sorrel. Dr W Matthews calls it *Rumer hymenosepalum*, and Dr Geo H Pepper says it "is commonly known as *canaigre*." It has a long, fleshy tap-root, not unlike a slender parsnip, throws out a dense bunch of almost lanceolate leaves, from the midst of which there rises a slender stem, sometimes two or three, with a long spike of blossoms and seed. The plant is a perennial and besides multiplies fast by seed. It is difficult to eradicate, which can be done only by digging out the root.

The fleshy roots of this plant are gathered, bruised on a metate or between two stones. While the crushing is going on tsě dokózh is added and ground with the roots into a paste. The cold paste is then rolled between the hands and rubbed and worked into the wool. If the wool does not seem to take the color readily a little water is dashed on the mixture of wool and paste, and the whole is slightly warmed. The entire process does not occupy over an hour, and the result is a color much like that known as old gold. This process was witnessed and described by Dr Matthews.

Dr Pepper describes a third process of making yellow dye, in which the bruised roots of chāt'ini are boiled and tsě dokózh

added during the boiling. The wool or yarn to be dyed is boiled in this solution.

RED.—This is a purely vegetable dye, all the ingredients being plants or parts of plants. To make this dye the woman first burns some twigs of the juniper tree, *Juniperus occidentalis*, called gäd. The root of tséësdāzi, *Cercocarpus parvifolius*, a kind of mountain mahogany, are crushed and boiled. To this is added the juniper ashes and the powdered bark of the black alder, *Alnus incana* var. *virescens*, known as kish, together with a plant called n'ähdlád, a moss, which acts as a mordant. After this mixture has boiled until it is thought to be right it is strained and the wool or yarn is soaked in it over night. The result is a fine red color.

The dull reddish dye is made of the powdered bark of kish and the root bark of tséësdāzi, which makes a fine tan color on buckskin, but produces a rather pale shade on wool.

The brilliant red which constitutes the ground color of many of the older Navaho blankets was made entirely of bayeta. Bayeta is a very bright scarlet cloth, much finer and more brilliant than the scarlet of the Indians. It was originally brought into the Navaho country from Mexico by the Spaniards. The Navaho unraveled this cloth and reweave it into their blankets. In 1881 Dr W Matthews wrote that "the Navajos were still largely using bayeta, which was being supplied to the trade from our eastern cities. Since then the American yarn has become pretty popular with the Navajo weavers, and many very beautiful blankets are now made wholly or partly of Germantown wool." Since this was written the bayeta has been totally replaced by Germantown yarn and aniline dyes.

In former years the Navaho had a native blue made of adish-tł'ish, a kind of blue clay which was pulverized and boiled with sumac (kī) leaves to obtain a mordant. Later this was entirely superseded by indigo (bēēdiltł'ish) obtained from the Mexicans. Urine, preserved in large Zuñi pots, was used as a mordant into which the indigo was poured and the wool dipped. This was

then allowed to stand from five to ten days after which it was removed from the vessel and after drying was ready for use.

Green was made by mixing the native yellow with indigo; orange, of the root of the dock or sorrel mentioned above.

The store dyes, or analine dyes, are prepared by dissolving the dye-stuff thoroughly in a cup of water, which is then poured into a pot of boiling water. The wool or yarn is moistened before being dipped into the solution.

For dipping and extracting the wool the woman makes use of two thin, slender sticks.

ăghă daaldîn yisdîzigi, already spun yarn.

chîlchîn (kî) yishbêzh (shêlbêzh, deshbish), I boil the sumac.

jê yistês (sêlt'ê', destîs), I roast the gum.

tsêkhô yistês (sêlt'ê', destîs), I roast the ochre.

jê, gum, pitch; jê tqashnîl (tqânîl, tqâdeshnîl), I mix the gum.

jê tsêkhô bil tqashnîl, I mix the gum with the ochre.

jê diltlâ, the pitch caught fire, burned.

tsêkhô, ochre; tsê dokôzh, a kind of native alum or rock salt.

châtîni (jâtîni), dock or sorrel; tséësdâzi, mountain mahogany;

tséësdâzi behêtlôl, root of the mountain mahogany; tséësdâzi

behêtlôl bakhâgi, mountain mahogany root bark; tséësdâzi bitqô,

mountain mahogany juice or decoction.

găd, juniper; găd didlîd, burnt juniper, juniper ashes; kîsh, black alder; kîsh bakhâgi, alder bark; kîltsôî, golden rod; nî'hadlâd, moss.

bi'ijfhi, pot in which black dye is boiled; bi'ilchfhi, vessel in which red dye is boiled; bi'iltsôî, pot in which yellow dye is boiled; bi'idîtlîfzhi, pot in which blue or green dye is boiled.

ishf (îshî, ideshîl), I dye black; na'ishf, I dye black again; âghă yishf (yîshî, yidêshîl), I dye wool black; âghă naneishf, I dye wool black again.

ishchf' (îlchf, ideshchî'), I dye red; na'ishchf, I dye red again; âghă yishchf (yîlchi, yideshchî'), I dye wool red; âghă naneishchf, I dye wool red again.

istsó (íltsoi, idéstsó), I dye yellow; na'istsó, I dye yellow again; āghā yistso (yíltsoi, yidéstso), I dye wool yellow; āghā naneistsó, I dye wool yellow again.

adishtl'ish (adíltl'izh, ādīdéshtl'ish), I dye blue; āghā dishtl'ish, I dye wool blue; āghā nāndishtl'ish, I dye wool blue again; nādishtl'ish, I dye blue again.

tqátlid nahalíngo adishtl'ish, I dye green; tqátlid nahalínigi ashlé, I dye (make) green.

debélchī nahalíngo yishchí, I dye the color of red-brown sheep.

debélchi nahalínigi ashlé, I dye (make) the color of red-brown sheep.

tsēdídé nahalíngo yishchí, I dye purple, color of four-o'clocks.

tsēdídé nahalínigi ashlé, I dye (make) purple.

tsīn biyilchí nahalíngo yishchí, I dye a deep red color, like tsīn biyilchí; tsīn biyilchí nahalínigi ashlé, I dye (make) a deep red (ox-blood) color.

āghā yilzhí, wool dyed black; āghā yilchí, red dyed wool; āghā yiltsūi, yellow dyed wool; āghā diltl'izh, blue dyed wool; āghā dinilchí, pale red wool; āghā diniljí, pale black wool; āghā diníltsoi, pale yellow wool; āghā diníltl'izh, pale blue wool.

āghā tǎyisi yichí, wool dyed a bright red, very red; āghā tǎyisi yizhí, wool dyed very black; āghā tǎyisi yiltsói, wool dyed a bright yellow; āghā tǎyisi diltl'izh, wool dyed a bright blue.

neibá', faded, it got gray again.

neigái, faded, it got white again.

bēilchí bitl'ájani, sediment of red dye; bēijí bitl'ájani, sediment of black dye; bēiltsói bitl'ájani, sediment of yellow dye; bēiltl'izhi bitl'ájani, sediment of blue dye.

adestsín, stick for dipping in and taking wool out of dye pot.

āghā bībiistsé (yéltse, diyéstse), I put (poke) the wool into the dye with the stick.

āghā qabiistsé, I take the wool out of the dye with the stick.

āghā tsīn bākhá nibistsé, I spread the wool on a tree with the stick; āghā chīl bākhá nibistsé, I spread the wool on a bush with the stick.

PUTTING UP THE LOOM.—After dyeing sufficient yarn comes the important work of putting up the loom. No special ceremonies or rites are connected with the erection of the loom. Two posts or saplings (1)*, which may or may not be forked at the top end, are planted firmly into the ground. No particular kind of wood is required for them, but any poles or posts of sufficient size and strength will answer. Sometimes two trees growing sufficiently near each other are selected for this purpose, or a tree and a post, whichever is most convenient. To these two upright posts or trees are lashed horizontally two crossbeams or braces (2), one above and the other below. The lower one is either totally or partly imbedded in the ground, and is sometimes used in place of the weights, of which later.

Next the warp is stretched. This is done separately. Two poles or saplings or logs (3 and 15), whichever is handiest, are laid parallel to each other upon the ground. Near the ends of these two logs the two blanket poles (4 and 5), round, smoothly-shaven sticks, seven or eight feet long, are tied so that they form an oblong square with the logs. The warp (12) is then wound up and down, under and over these two blanket poles, in one continuous strand, in such a way that the strands form approximately the shape of a much elongated figure 8, since they cross each other at the center.

Next the end strands (9 and 11) are put on, one at the upper and one at the lower end, just next to the blanket pole. These end strands consist of a strong, tightly woven cord, which is doubled when put on, both ends being crossed over each other after every warp-strand.

The blanket poles are then pulled out of the warp and again tied to the two logs an inch or two further away, and another strong cord is wrapped spirally (7) around the blanket pole and the end strand. This done at both ends, another beam or pole (3), which might be called the yard-beam, is attached with ropes to the upper blanket pole, while the lower one (15) is similarly

*The figures in this and following refer to illustration on page 221.

attached to the lower crossbeam. The just mentioned yard-beam is then connected by means of a spiral rope (6) with the upper crossbeam, and the whole warp frame is raised to a perpendicular position between the two uprights, after having been detached from the two logs lying on the ground. The warp-strands are made taut and rigid by pulling tight the spiral rope (6) which connects the upper crossbeam with the yard-beam.

When no lower crossbeam (15) is used, or when it is not used as described above for holding tight the lower part of the blanket, either logs, stones or boxes and bags of sand or stones are attached to the lower blanket pole (5), and sometimes anchored into the ground to keep the warp-strands stretched.

Now the border strands (8) are put on, one on either side. These are two heavy, strong cords which, with the end strands, form the edge of the blanket. Usually they are made to end in a tassel at the four corners of the blanket.

After this two long, slender sticks (13 and 14), a little longer than the blanket is broad, and which might be called healds, are attached to the warp-strands. The upper one (13) lies loosely in the upper part of the elongated figure 8 of the warp, while the other (14) is attached to the outside of the warp by means of a looped string (10), by which the rear warp-strands are fastened to the stick. By pulling this heald stick, or any portion of it, towards herself, the woman brings the rear warp-strands forward beyond the front strands to pass through the yarn.

da'istl'ó, or yistl'ó, loom.

(tsín) bada'istl'ó ba'i'áhi, uprights; (tsín) ádasétqâ, crossbeam.

(tsín) da'naló'i, or ada'nalcháhi, yard-beam.

(tsín) bikídesdizi, or átl'ótsín, upper and lower loom poles.

(tl'ól) beda'istl'ó (bedahistl'ó), spiral beam rope.

(tl'ól) beëqída'istl'ó, loom rope, by which upper blanket pole is tied to yard-beam.

abânát'i' (bânát'i'), border strands; bēildestl'ó, end strands.

(tl'ól) bedándiltsóhi bebildestl'ó, looped string on heald stick.

(tľōł) bēēkfidesdizi, spiral end yarns; bijánĭl, end tassels.
nānolzhě, warp.

ísinil (ísēnĭl), the two heald sticks.

ăđēg sětqâ, upper heald stick; beda'ndĭltsóhi, lower heald stick; beēdāndĭldzoi, lower heddle.

(tľōł) ľēdastľĭ, string by which the lower loom pole is tied to weights.

tsāzĭ ľēdastľĭ, same as foregoing when yucca fibres are used.

tsĭn akĭsětqāni, "log lying on," used as weight on lower loom pole; tsĭn akĭsĭnĭli, two logs used as weights on lower loom pole; tsĭn akĭsĭyĭni, more than two logs used as weights on lower loom pole; tse akĭsetqāni (akĭsĭnĭli, akĭsĭyĭni), stone used as weight; ľesh akĭsetqāni (akĭsĭnĭli, akĭsĭyĭni), ground used as weight.

a'setqâ, or fsetqāni, lower crossbeam.

da'ishtľō, I get the loom ready, am putting it up.

da'istľō, da'hastľō, the loom is ready.

naneshshé (na'nĭshshē, nadĭneshsha), I put on the warp.

adestśōd (adēłtsōd, adĭdéstśōł), I stretch, tighten.

nanolzhě destśōd, I stretch or tighten the warp.

beēkfĭdĭdĭz, shuttle, twig shuttle.

WEAVING.—The foundation of the blanket is now laid and the woman gets ready to build upon it. After spreading a sheepskin or a saddle-pad in front of the loom, and placing her yarns and implements within easy reach, she squats down upon the rug, just in front of the loom, her legs folded under her with soles turned upward. The warp-strands hang perpendicularly before her, and she weaves her blanket from below upward. She uses neither drawn, nor painted, nor stenciled patterns to guide her, but arranges her figures and designs as she progresses in her work, and works them out with such colors as she has on hand. Each color has a separate ball or skein of yarn, so that at times a half-dozen or more yarns are hanging down before her from the warp, but she never gets them mixed, nor makes a mistake or a miscalculation as to which one is to be used next.

Now, since she never changes her position, but retains her squatting position until the blanket is finished, it is evident that after some time, when the weaving has progressed to a certain height, further weaving will become inconvenient, or totally impossible, unless there be some contrivance attached to the loom by which the work can be kept within convenient reach. At such stages of the work the spiral rope (6), by which the yard-beam is held to the upper crossbeam, and which has been tied within easy reach of the weaver, is untied and the rope let out. The spiral loops of the rope are thereby naturally enlarged, which causes the yard-beam, and with it the whole warp, to lower down. When it has been lowered to the desired level the rope is firmly retied, a fold is made in the already woven part of the blanket, which is tightly sewed with a large darning needle or a sack needle to the lower loom pole with a stout piece of yarn. The weights at the bottom are readjusted so that the warp-strands are again taut and rigid, and the weaving is reassumed until another lowering becomes necessary.

The marks of this sewing down can easily be seen on all new blankets and often, too, on old ones. They run like a large welt across the whole width of the blanket, and may be noticeable for years, even until the blanket is worn out.

da'ishtló (da'iyétló, da'diyeshló), I put up the loom.

da'istló, the loom is up, ready.

ashtló (asætló, adeshtló), I weave; beëldlé yishtló (sætló, deshtló), I weave a blanket; beëldlé la nanashtló (næsætló, nadeshtló), I weave another blanket.

qaashtló (qasætló, qadeshtló), I begin to weave, put in first yarn; istló bóhosh'á (bohól'á, bohidesh'á), I am learning how to weave; ashtló (yishtló) bæ(qas)sin, I know how to weave.

atló bina'nshtqin (bina'néltqá, bina'dfneshtqil), I teach weaving.

ashtló binishtqá (binétqá, bidfneshtqá), I am practicing weaving.

chæádishtló (adétló, adideshtló), I am trying to weave (but do not succeed); the past tense, chæádétló, conveys the meaning, I am tired of weaving.

aqosístīd ashtl'ó háé, I am quitting to weave.

alájí ashtl'ó (yishtl'ó), I always weave.

dáákwi jī ashtl'ó, I weave every day.

beēdlé ninshtl'ó (nútłô, ndeshtl'ól), I finish the blanket.

ashtl'ógo (yishtl'ógo) shilyaāt'ǎé, I like to weave.

ashtl'ógo (yishtl'ógo) do-shilyashón-da, I do not like to weave.

náneszāgo yistl'ó, loosely woven.

dōhōzhō náneszā-da, not very loosely woven.

náneszāgo ashtl'ó (yishtl'ó), I am not weaving very loosely.

aqinestqígo yistl'ó, tightly woven; aqinestqígo ashtl'ó (yishtl'ó),
I am weaving tight; do-aqinestqí-da yistl'ó, not tightly woven.

do-aqinestqígo ashtl'ó (yishtl'ó), I am not weaving tightly.

qanashníl (qanáshníl, qadeshníl), I unravel.

abá adinshkhál (adinéłkhāl, adinéshkhāl), I make a fringed
border; ajáníl ishlé, I make (put on) the end tassels.

beēdlé do-ilínigi, or do-yaāt'éhigi, a poor blanket; beēdlé ilfni,
or yaāt'éhi, a good blanket; beēdlé ntl'ízigi, a hard blanket;
beēdlé ilzhóligi, a soft blanket; beēdlé detqánigi, a thick
blanket; beēdlé al'táhigi, a thin blanket; beēdlé ntsáigi, a large
blanket; beēdlé al'tsísigi, a small blanket; beēdlé nnǎezigi, a long
blanket; beēdlé al'tsósigi, a narrow blanket.

beēdle babá, the border of the blanket.

beēdlé chōsh alchōzhi selī, a moth-eaten blanket.

beēdlé nēhēst'ód, a torn (worn-out) blanket.

beēdlé ánīdi, a new blanket; beēdlé hastqí, an old blanket.

abá nēltqíl, or nelkáligi, a fringed border.

yaādistsós (yaadiyéłtsōs, yaādiyéstsōs), I lower down the warp.

yanádistsós, I lower down the warp again.

nadistsód (nadéłtsód, nádestsól), I stretch or tighten it again.

náshkhád (naséłkhád, nádeskhkhāl), I sew it.

yaādistsos náshkhád, I sew down the blanket warp.

beēdlé nadistsós (nadíłtsōs, nadidestsós), I take down the
blanket (from the loom).

beēdlé dahidishlé (dahidíłó, dahidídeshló), I weigh the blanket.

beēdlé aqâ'nishlé (aqâ'nílá, aqâ'dineshlél), I fold the blanket.

beëldlé aqâ`danishlé, I fold the blankets.

beëldlé yisdīs (sædiz, desdīs), I roll up the blanket.

beëldlé dāisdīs, I roll up blankets.

beëldlé noshtqād (naiséltqā, na'idéshtqā), I unroll the blanket.

beëldlé ndoshtqād (ndaiséltqā, ndaidéshtqā), I unroll the blankets.

beëldlé hānīshchād (qānīlchād, qādīneshchād), I card the blanket.

beëldlé hadanshchād, qādanēlchad, qādadīneshchād), I card the blankets.

beëldlé yishshó (yīshshō', deshshó), I brush the blanket.

beëldlé yishdē (yīldē', deshđā), I clean the blanket.

beëldlé dashdē (dāldē', dadeshta), I clean the blankets.

beëldlé yishqād (yīghād, deshqād), I shake the blanket.

beëldlé dashqād (dāghād, dadeshqād), I shake the blankets.

beëldlé ihistsós (ihīltsōs, īdestsós), I put the blanket away.

beëldlé ihishnīl (ihīnīl, īdeshnīl), I put the blankets away.

beëldlé nahashnī (nahālnī, nahidēshnī), I sell (or buy) the blanket; beëldlé shānāhāznī, the blanket is bought from me.

beëldlé yishtlīn (sætlīn, deshtlīn), I pile up the blankets.

beëldlé sha'īltsós (sha'īltsōs, shadohtsōs), I borrow a blanket. (pl. nīl.)

beëldlé shayīltsós (shayīltsōs, shādohtsōs), a blanket is given to me. (pl. nīl.)

beëldlé nanstsós (nañltsōs, nā`destsōs), I loan you a blanket.

IMPLEMENTS USED IN WEAVING.—The most necessary and important tool or implement used by the woman in weaving is what might be called the batten-stick (benīkīnīltīsh, usually pronounced benkīnīltīsh) with which one rams or falls down on it. This batten-stick (17) consists of a flat piece of wood, scrub oak or any other hard wood, about three feet long, three inches wide, and a half-inch or less thick. It is shaped at both ends like the prow of a boat, and has a thin, blunt lower edge. With this batten-stick the woman separates the warp-strands by inserting it alternately between them. After the batten-stick is

inserted into a part of the warp-strands so that one-half is on either side, in alternate order, she gives it a twist which turns it flat-wise. This naturally opens the strands the width of the batten, or about three inches, which is sufficient to pass through the yarn. The yarn being thus placed in position, the batten-stick is again turned edge-wise, and with three or four vigorous downward blows it is driven tight into the bristly warp-strands.

Upon the force and energy with which the batten-stick is used depends, to a great extent, the hardness, firmness and durability of the blanket. Frequently the web is rammed down so tight as to make the blanket waterproof, so that water can be carried in it without any danger of its leaking or soaking through, or the blanket may be used for a lifetime as a floor-rug, and in such places where a whole family is obliged to walk over it several times a day with well-shod feet.

As the batten-stick is only about three feet long it will be easily understood that the yarn is never passed through the whole width of the warp at one time, but only through that space which has been opened with the batten-stick. To facilitate the insertion of the batten-stick between the warp-strands, or when it is desirable to put in a longer piece of yarn, the bealds, described in a preceding paragraph, are brought into use. If the yarn is to be run through the warp-strands for some length it is wrapped around a small, slender, smooth-shaven stick or twig, which is passed through after the manner of a shuttle.

Besides the large batten-stick the woman usually has several smaller ones, sometimes as many as five or six, all of different sizes, which are used as the blanket approaches completion, when the large stick can not be used to advantage. When even these small batten-sticks can no longer be used the yarn is pushed through the warp and pressed tightly in place with very thin, long, slender sticks, or wooden needles, called *be'inaältf'í'*.

Another important implement of the Navaho weaver is what might be called the batten-comb (*beědzóí*), which is a combination of a comb and an awl (16). It is made of a piece of hard

wood, about six or eight inches long, one and one-half inches broad, and one-fourth of an inch thick. At one end five or six cuts are made into the wood, forming six or seven teeth or prongs resembling the teeth of a comb; the other end is whittled down to a sharp, slender point, scraped and polished off smoothly, resembling an awl. The comb end of the beēdzōi is used to press the yarn, after being inserted between the warp-strands, into position before ramming them home with the batten-stick. This is done by holding the instrument as one would hold a paint brush, and by striking gently downwards upon the yarn. The awl end is used either to regulate any uneven or irregular distribution of the yarn, or to loosen any part rammed too tight. The beēdzōi is, therefore, especially employed when making loosely woven or soft blankets or rugs.

benīkīniltłish, or beēkīniltłish, batten-stick.

benīkīniltłish altsōsigi, slender (small) batten-stick.

benitłō, very small batten-stick, used when near finishing.

be'inaāktī, long, thin polished twigs, used in place of batten-stick at the finishing of the blanket.

tsin tsōsi, wooden sticks or needles, for passing through the yarn, shuttle needles.

benāākhâ, or benāādlō, large darning needle, for sewing down the blanket while weaving.

beētłō, balls or skeins of yarn of various colors, for weaving.

nikīnishtłish (nikīnēłtłish, nikīdinéshtłish), I ram down.

benīkīnishtłish, I ram down with it.

dāhāndīlkā, very small batten-stick.

beēdzōi (bēidzōi), batten-comb and awl.

asdzō (fzō, ādesdzō), act of rubbing a notched stick with another.

naāsdzō, repetition of foregoing.

tsín yisdzō (sézō, desdzō), I rub a notched stick.

MATERIALS OF TOOLS AND IMPLEMENTS.—As a rule no especial material or wood must be used to make any particular tool or implement, and whatever is most convenient or handy is made

to answer. However, there are certain kinds of trees and shrubs whose wood is preferred if it can be had.

For uprights any posts will do, but cedar and piñon are preferred. Piñon is preferably employed for beams and loom poles. For the stick or handle of the distaff, tséěsgízi, duwúzhizhīn, tsítłiz or kinjil'ai are used, while the whorl may be made of any kind of flat wood, board or lumber. For the heald sticks, kaí, duwúzhizhīn, tséěsgízi, tsítłiz, or any slender twig is taken. The tsīn tsósi, béédzōi, benitłó, be'inááłt'i, and in fact all small, slender sticks used in connection with weaving, may be made of the same material as the stick or handle of the distaff, although tsítłiz is preferred. The batten-sticks are made of scrub oak, or any hard wood (tsintłiz).

gād, cedar; chá'ól, piñon; duwúzhizhīn, black greasewood; tsintłiz, any hard wood; tsítłiz, *Pindlera rupicola*; kinjil'ai, wild currant; chéechil (tséechil), oak; kaí, willow; tséěsgízi, a kind of mountain mahogany; tsin nēheshjī, a board of any kind.

KINDS OF WEAVE.—On her simple and primitive loom the Navaho woman, by deft and dexterous manipulation, is able to weave blankets and rugs in five or six different styles.

1. yistłó.—This is the method described previously, in which the woof-strands are drawn horizontally through the warp and rammed tight with the batten-stick. Two healds are used in this mode of weaving.

2. yishbífzh.—This word means braided, but is used in connection with blankets to designate a peculiar figure or run of the web, which runs diagonally across the blanket, giving it the appearance as if it were begun in one corner and woven to the opposite corner. The position of the loom and of the weaver is the same as in No. 1, but more healds are used.

3. i'imās.—This weave has a very peculiar appearance; the whole blanket seems to consist of diamond shaped fields inside

of which are other diamond shaped figures, sometimes of a different color, seemingly woven about a spot in the center. This weave, too, depends upon the number of healds used, and is mostly employed for making saddle blankets, although occasionally one sees a larger blanket woven in this style. The word *i'ímās* means, or rather designates, contiguous squares.

4. *dīyúgi*, or *dīyógi*.—This is really not a special style of weave since it is the same as No. 1, only that soft, loose yarn is used, which makes the blanket look thick, soft and fluffy, and that is expressed by the word *dīyúgi*, or *dīyógi*. Here might also be added Germantown blankets, or blankets which are woven of Germantown or machine-spun yarn, and bayeta blankets, in the manufacture of which the unraveled strands of the bayeta cloth were used. Bayeta blankets are not often made.

5. *ditsósi*.—This word, meaning fuzzy, downy, is applied to a species of blankets or rugs the one side of which looks very much like a long-haired sheep pelt, with the wool in small tufts. When the woman weaves this sort of blanket she has a quantity of long-haired wool near at hand. She first weaves about an inch, then taking pinches of the long-haired wool, inserts them between the warp on the top of the woven part, leaving a tuft of about two inches stick out in front. When the whole row is thus tufted she rams it down with the batten-stick, weaves another course of about an inch, inserts another row of tufts, and thus continues until the blanket is finished. When finished it has the appearance of a shaggy pelt.

6. *alné'ěstlóni*.—This is a double or two-ply weave, which shows a different design on either side. In weaving in this style as many as eight healds are used. By manipulating them in the right way the desired result is obtained. In order to understand just how it is done one would have to see a woman at work, and pay close attention to the manner of weaving, and to the arrangement and the use of the healds.

yistl'ó, it is woven, regular weave.

yishb'ízh, it is braided, diagonal weave.

i'ímās, rounded within, a complex of squares.

diyúgi, or diyógi, soft, fluffy.

ditsósi, fuzzy, downy.

alné'éstl'óni, woven on both sides, a different design on either side.

yishb'ízhgo ashtl'ó, I weave in braided style, diagonally.

beéldlé yishb'ízhgo yishtl'ó, I weave a diagonal blanket.

i'ímāsgo ashtl'ó, I weave in iimas.

beéldlé i'ímāsgo yishb'ízh, I weave a blanket in iimas style.

diyúgi āghá beāshtl'ó, I weave soft and fluffy.

beéldlé diyógi āghá beyishtl'ó, I weave a soft and fluffy blanket.

ditsósi āghá beāshtl'ó, I weave downy or shaggy.

beéldlé ditsósi āghá beyishtl'ó, I weave a shaggy blanket.

alné'éstl'óni āghá beāshtl'ó, I weave doubly.

beéldlé alné'éstl'óni āghá beyishtl'ó, I weave a double blanket.

t'lól beéstl'óni, a Germantown blanket.

t'lól beēshtl'ó, I weave with (Germantown) yarn.

beéldlé t'lól beyishtl'ó, I weave a Germantown blanket.

nakâłchí qahadósigi, bayeta cloth.

nakâłchí qahadósigi beéstl'óni, woven of bayeta.

beéldlé nakâłchí qahadósigi beéstl'óni, a bayeta blanket.

nakâłchí qahadósigi beāshtl'ó, I weave with bayeta.

beéldlé nakâłchí qahadósigi beyishtl'ó, I weave a bayeta blanket.

THE USE OF THE LOOM

The following presents a list of the older blankets, and of such patterns as have given the blanket a special descriptive name. The older patterns were few in number though the design was a matter of option and varied according to taste.

bīl, woman's dress, was originally woven in black and blue. The black color, which is a fast jet black, was made from a mixture of sumac, pitch and native ochre, called tsékhô jē kī,

while the blue was indigo (*bēdīltīsh*), obtained from the Mexicans. The top and bottom of the blanket alternated in four lines of blue and three of black, with the body of the blanket, or its center (*alnī*), a plain jet black. The whole was bordered (*bānātī*) and tasseled (*bijānīl*) in blue.

With the introduction of bayeta red was substituted for the blue in the body of the blanket, though the blue border and tassels were retained (*dotīsh beqāotlō*, the weave runs out in blue). The solid black center, too, was retained, and gradually various designs of red and blue were woven with the black (*hizhīn biklestlō*) at each side of the center belt.



bā dotīzhi, or *bīl babā dotīzhi*, blue borders. This was a woman's shawl, and owes its name to the two borders of blue which flanked the center of black. While the *bīl*, or woman's dress, was of two pieces, which were sewed at the top and sides, leaving an opening for the head and arms only, the shawls were made in a single pattern and used after the manner of a shawl or wrap, much as the men use the blanket.

bīl laḡaī, white shawl, was so called from the alternating white and red color which was woven horizontally in narrow strips throughout. The border and tassels were blue. It was the only woman's garment in which white was used, and was therefor appropriately designated. The woman's dress and the shawls are not used to-day though some are made for the market.

nāgo nodōzi, horizontally striped, a blanket woven in alternating stripes of black and white, with an occasional narrow strip of red added in the center, and the end belts of black. Red tassels decorated each corner.

A similar blanket, and one much in demand by the Utes, was

known as *alnī na'fjini*, or the blanket with the black (streak) belt in center. While the body of the blanket was laced with strips of white and black, the center was mounted with a wide black belt, with additional red and blue stripes woven in between. Similar belts were woven in equidistant intervals between the center belt and the ends, though they were narrower than the center belt. The corners were decorated with black tassels, making a very attractive blanket.

nakhai bichīdi, the Mexican rug or pelt, was a pattern borrowed from the Mexicans. The center was woven in a belt of blue flanked by narrow strips of black, the remainder of the blanket alternating in belts of white, black and blue, interspersed at optional intervals. The design was a very plain one and made for the Mexican trade.

The *hānolchāde*, or carded blanket, which is now designated as the chief's blanket, is probably the chief of blankets, though it can hardly be said to have been worn by the chiefs exclusively. Here, too, the original idea of alternating stripes of black and white is retained in the body of the blanket, though as a distinctive feature three zigzag diamonds made of small cubes of blue, red and black yarn are set in the center of a wide belt of black. The interior of each diamond is a perfect white surmounted by a red cross in the center. The top and bottom of the blanket is finished in similar half diamonds. The patterns of modern blankets are largely variations or modifications of this one.

baghaftlōni, slit-weave. No special design seems to have been assigned to this blanket, but any blanket might be woven so as to leave a slit about four fingers wide in the center of the blanket, which was afterwards laced with blue yarn. It is generally stated that this weave had to be occasionally resorted to in order to avoid overdoing weaving. Yet it has also been advanced that this blanket was worn by the men just as the women used the *bil*, or woman's dress, and that to avoid ridicule, the above version of overdoing the weaving has been attached

to the "slit-weave." But this seems rather far-fetched.

The above are said to be the old style blankets. Other blankets especially designated are:

beëdlé, or beëdládi, the warp, any kind of blanket.

diyúgi, or beëdlé diyúgi, soft, fluffy blanket; beëdlé ditsósi, downy or shaggy blanket; akída'íníli (akídahí'níli), "which are laid on something," the saddle blanket.

beëdlé ałné'ěstlóni, doubly-woven blanket.

beëdlé tlōi beëstlóni, Germantown blanket.

beëdlé nakálchí qahatsósi beëstlóni, a bayeta blanket.

beëdlé yishbízhgo yistlóni, diagonal weave.

beëdlé i'ímāsgo yistlóni, blanket woven in squares.

beëdlé dotlízhi, blue blanket, whose prevailing color is blue with occasional red and black stripes interspersed.

The loom was also used for weaving shirts for the men:

æ dotlízhi, blue shirt, from its prevailing color.

æ ndādeschí, red striped shirt, from the red stripes which ran through the body and sleeves of the shirt. The sleeves were



Blue Shirt.



Shirt with red stripes.

woven separately, laced together and sewed to the shirt, which in turn was laced down the sides. These shirts are no longer woven.

Other articles woven on the loom were:

sís, or esdzán bizís, woman's sash. Originally this was woven

of black yarn with a blue band in the center. Since the introduction of bayeta they are now exclusively woven of red yarn and are, therefor, designated as *sīs lichfigi*, red girdle. These



are belts about four inches wide and six or more feet long, woven in red, with small white designs, and long fringes at each end. The sash is still in use.

jānēzhi (*jād nēzhi*), or *yistlē* (*yistlē*) *tłōl*, garter strings, used in fastening the leggings, are bands about two inches wide and two feet long. They were of red, black and blue colors, though red is now preferred.

The *tsītłōl*, hair-cord, used in tying the hair, is of the same pattern as the garter strings. At present several strands of common twine are used instead.

āchöshtłōl (*āchöshtłōl*), or *h bichöshtłōl*, girth or cinch, is about five or six inches wide and two and one-half feet long, and is provided with stout fringe at both ends to secure the iron rings. They are usually made in red with a row of diamond shaped figures in white and other colors.

aghāsīs tłōl, wool girdle rope, because it is woven like the sash.

dabála (Sp. *taparo*), is the shawl of Mexican introduction, and is not woven by the Navaho.

While the ordinary loom was used for all of the above-mentioned fabrics, smaller devices for the manufacture of garters, hair-cords, sashes, cinches and cradle cords, have gradually come into use. The loom for the sash and cradle-band is the ordinary loom in miniature. Similarly, the prongs of a forked pole now answer the purpose of uprights in the garter and hair-cord

looms, while the warp for the cinch is fastened immediately to the cinch rings, which in turn are lashed to a tree or post in a manner most convenient for operation. The warp, heald, shuttle, in fact all the various parts of the smaller looms, are designated by the same names as those used with the larger loom. The smaller looms, however, have special names.

tsītl'ól yīstl'ó', hair-cord loom; jānézhi, or yīstl'étl'ól yīstl'ó', garter loom; esdzán bizīs yīstl'ó', sash or belt loom.

hī bichōshtl'ól, or achōshtl'ól yīstl'ó', cinch loom.

DESIGNS.—When weaving a blanket the Navaho woman does not have before her a plan or design, carefully worked out in detail upon paper or buckskin, nor even roughly sketched upon the sand. She may have the figures, even the whole design in her mind before beginning to weave, but, as a rule, the design develops with the work. Most of the figures seen in a Navaho blanket are stationary, that is they reoccur in similar or different combinations, or with slight changes, in other blankets, and have set names by which they are known. There are no circles, arches or round corners in a Navaho blanket, but all corners are sharp-pointed at angles of various degrees, and all lines are straight, oblique, zigzag, serrated, etc.

There is no system as to the use of the different figures, that is, they are not arranged into any kind of hieroglyphic order by which a woman could weave her life's history, or any other history or story, into the blanket, as has been asserted by some writers. The Navaho blanket, therefor, is a *human document* only in so far as it shows the untiring patience and diligence, the exquisite taste and deftness of a semi-barbaric people, and the high art and quality of their work, wrought with such simple tools and materials.

As for designs in modern blankets, which by some are interpreted as replete with religious symbolism, such interpretations merely attach an undue idealism and importance to the design which it does not contain. A glance at the names for some of

the designs will bear out this point and show that these names designate figures found on paper, cloth, or anything else. Then, too, it will be remembered that Navaho women are devout and faithful clients of their religion, possibly more so than the men, and would scarcely trifle with religious symbols, many of which may be viewed in effigy in the course of certain rites, and at certain seasons of the year only. This conservatism is presumably responsible for the taboo (*bahádzid*) placed upon the following and similar designs: *í'ní'*, thunder; *átsínl'tl'ish*, zigzag lightning; *tqéholtsödi*, the water ox; *tqéłł*, the water horse; *déłgyéd*, a horned monster; *tsénahalē'*, a monster eagle; *lótso*, a monster fish; *tsístqéł*, a tortoise; *chā'daghái*, the turtle; *mā'i*, the coyote; *léchâi*, the dog; *châł*, the frog; *nashú'i díchíshi*, the horned toad; *tłístso*, the bull or blow snake; *tł'ishká*, the track snake, and snakes in general, in a word, anything harmful.

On the other hand, designs of the *natsłlıd*, rainbow; *sótso*, big stars; *atsólághál*, sheet lightning; *kā*, the arrow; *náhotsöi*, evening twilight; *náhodætł'ish*, celestial blue; *chahálqéł*, darkness; or of the sacred mountains, or anything of a beneficent character, may be designed with impunity.

The following are the names, with translations and descriptions, of some of the figures used in modern blanket designs. These are only some, to gather all the different figures, and to describe them, singly and in combination with others, would alone fill a volume.



1

1. *dákha náhálín*, (card-like), a square.
2. *beēditłí náhálín*, (slingshot like), a diamond, also called *sô tso*, big star.



2

3. *beēditłíhi*, (slingshot), an elongated diamond.



3

4. *tsín alnáozid*, (sticks crossing each other), Roman cross.



4

5. *sô*, (star), St. Andrew's cross.



5

6. *tqágo dez'á*, (three points), a triangle.



6

7. *sô deshzhá*, (pointy star), four lines crossed so as to form a figure with eight points, or a St. Andrew's cross drawn through a Roman cross. If made somewhat larger than ordinarily, it is also called *sô tso deshzhá*, big pointy star.

8. *tsiyél năhălin*, (like a queue), two triangles touching each other with their apices.

9. *tqágo dez'á be dígo des'á*, (four points with three points), four triangles touching with apices, a Maltese cross.

10. *năhokhôs*, said of large, long objects in horizontal rotation, a swastica cross.

11. *dăkha năhălîngo năhokhôs bî'nfsă'á*, (a *nahokhos* within a card-like figure), a swastica surrounded by a square.

12. *dăkha năhălîngi beălqi'ăz'á*, (card-like figures within each other), square inside of another square.

13. *beăditlî năhălîngi beălqi'ăz'á*, (slingshot-like figures within each other), diamond within diamond.

14. *noltlîzh*, a zigzag line.

15. *be'ndastlăgo noltlîzh*, (cornered zigzag), irregular zigzag.

16. *dana'ăzkhăgo noltlîzh*, (a row of empty places in zigzag order), a line resembling the crown of a battlement.

17. *yistlîn*, (freckled), small dots.

18. *dokhîsh*, (spotted), dots larger than the *yistlîn*.

19. *dădestsô*, spots somewhat longer than *dokhîsh*.

20. *beăditlî babă dolăghăs*, (slingshot with serrated edge), diamond with serrated edge.



7



8



9



10



11



12



13



14—15



16



17



18



19



20

21. dólāghās, a serrated line; bésdō-lāghās, (ancient knife of chipped flint).

22. kōs yishchín, (cloud image), a terraced figure on side of blanket.

23. hokhá, (a large empty place or receptacle), a large terrace-edged diamond usually in the center of a blanket.

24. hokhá beāłkhéāznīl, two hokhá following each other.

25. honākhá. a hokhá with a half hokhá on either end.

26. noltīzh ałnfāznīl, a figure with zigzag edge in the center.

27. dólāghās beāłkhéāznīl, two figures with serrated edges following each other.

28. āłkhé ndazhá, (pointed ones following each other), a row of small figures with points, for instance, v-shaped figures not too near together.

29. āńíkhē, (tracks), a double row of āłkhé ndazhá.

30. āqidełnāgo ndazhá, (sticking in opposite direction), same as āńíkhē only that the figures of one row are reversed.

31. āłkfdōtēzh, (touching each other), a row of small figures, one touching the other, for instance, a row of small flat-based triangles, set on edge, so that the apex of the one touches the preceding one at the center of the base.



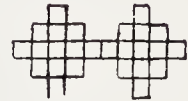
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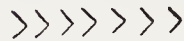
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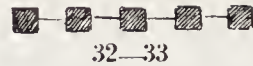


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31

32. *alkhëyĩtëzh*, (following and touching each other), a row of small figures connected by short lines.



32—33

33. *alkhëyĩtëzh dākha nāhālngo*, a row of small squares connected by lines between them.



34

34. *delzhā*, battlement-like elevations, especially along the border.



35

35. If another color is woven next to *delzhā*, and the intervening spaces are left a distinct color, they are called *i'nil*, enclosed, encased.



36

36. *alqĩhādōtëzh*, (touching, following within each other), said of a succession of small figures, usually along the border, of such a form that the space between them is a reverted reproduction of same.



37

37. *sō aqādē'nīl*, (two stars together), two large diamonds in center of blanket.



38

38. *hoshdūdi*, the name of the whip-poor-will, strewn with spots.

39. *alnī āzī*, (standing in the middle), said of any central figure of extraordinary shape.



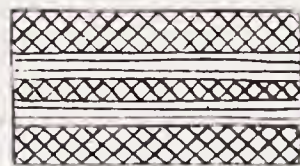
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40. *aqĩdinlnāgo dana'āzkhā*, (spaces opposite), a succession of small figures whose intervening space shows the same figure inverted or opposite.



40

41. *aqēdzēbā'*, means a gray stripe or border all around. This is used with other colors: *dzégai*, white; *jīchī*, red; *dzētsó*, yellow; *jījīn*, black; *jīdætīzīh*, blue.



41

naāshchā (*nashēchā*, *nādeschchā*), I make a design.

nashchā, designed, a design; *ndeichā*, they design.

benashchā, designed in (with); *naāshkhā*, design, figure.

diyúgi nasheliá, a fluffy blanket with a design.

ditsósi nasheliá, a shaggy blanket with a design.

likhízhgo nasheliá, a spotted design.

yistlíngo nasheliá, a speckled design.

beédítlí benasheliá, designed in diamonds. (see fig. 41.)

dákha nahalíngo benasheliá, designed in small squares.

nodóz, striped; dotlísh bēnodóz, blue stripes; lichí dégo bēnodóz, red striped upward; labá' yágo bēnodóz, gray stripes downward; htsó nanígo, or nágo bēnodóz, yellow horizontal stripes.

altsáji noltlísh, zigzag figure on either side.

dotlísh beqáotlô', blue is woven out, a blue border.

lizhín, etc., bídestlô', other colors woven with black (on a black background).

KNITTING

Knitting is practiced by the Navaho to quite an extent. Like weaving, this, too, was originally borrowed from the Pueblo Indians. At present only steel needles are used in knitting, which are either purchased at the trading post, or made of wire or the ribs of an umbrella (becháhá'óhi). These are broken to the proper length and slightly rubbed upon a stone to obtain a smooth blunt point. The paint or enamel is worn off in the course of time by constant use of the needles.

Before steel and iron was available, knitting needles were made of wood, for which the slender twigs of tsítlíz, *Findlera rupicola*, or of duwúzhizhīn, black greasewood, were used. Both are very hard and susceptible of a smooth, slick polish.

For knitting, blue, white and black yarns are used, and the present output of the knitting industry is limited to leggings and gloves. The latter (lájīsh) are made with a separate thumb, although in late years some have also been knitted with all five fingers separate.

Leggings (yistlé) consist of long footless stockings, encasing the leg from kneecap to instep. At the top end a raised rim,

about one-half to one inch wide, is knitted by using *left* stitches, that is, the yarn is passed from left to right instead of the usual way. This rim affords a hand grip, and also adds to the wear and tear in pulling on the legging. To distinguish the right from the left legging, and the inside from the outside, a line or ridge is knitted down along the outside of the legging in relief, like a raised seam, by using *left* stitches at this point. At the lower end of the leggings a knitted or plaited wool cord is fastened, which passes under the foot below the instep, to keep the legging from working upward. The foot and lower legging is covered by the moccasin.

The stitch in knitting is closer and more tightly drawn than our own. Special care is paid to this feature to insure strength for long and hard usage.

Since leggings were always considered a part of the male attire (women have begun to wear them only in recent years) knitting was and still is mostly done by the men. The yarn leggings were not made or worn for riding purposes, for which they made leggings of leather or buckskin, and both were worn at the same time.

ashtłó (asætłó, adeshtłó), I knit, weave.

yistlé yishtłó (sætłó, deshtłó). I knit leggings.

lájish yishtłó, I knit mittens.

yistlé, (covering), legging; khétqīl, (footgear), stockings.

lájish, (handbag), mittens, gloves.

yistlé dotłish, blue leggings; yistlézhīn, black leggings.

yistlélgai, white stockings (leggings).

bidá na'astłó, (reknitted lip or rim), finished rim.

khítqīn, or qáátqīn, (road on or out of), ridge along the side of legging.

bakhádi, (on top), outer side of; biyfī, (inside), inner side of.

didzídgo ashtłó (vishtłó), I knit strongly, closely; nldzīlgo ashtłó (yishtłó), I knit tightly; naneszágo (vishtłó), I knit loosely; nizhúnigo ashtłó (vishtłó), I knit nicely.

yistlé beētlóhi, (with which one knits), knitting needles.
bidā nahineshzháhigi, fringed rim at top of legging.
bádildzid, (it dropped), I dropped a stitch.

SHEEP RAISING

The Navaho country is especially adapted to sheep raising, and the Navaho equally well fitted for pastoral life, a coincidence which practically has placed him on a self-supporting basis. Sheep, horses and cattle are unquestionably of Spanish introduction, so that references to them in legend, song and prayer are of comparatively recent date, and are held as such by many Navaho. It is also pretty well established that previous to the advent of the American, and even sometime thereafter, the Navaho was not given to pastoral life, but to less peaceful pursuits, such as raiding and marauding, and as a matter of fact, droves of horses were kept for this very purpose. Subsequent to the return from Fort Sumner, sheep and cattle were issued to them by the Government, and increased by honest, and often by dishonest means, though the stringency of the law has at present put an end to the purloining of cattle.

While their method of herding sheep leaves much to be desired, a steady improvement is nevertheless to be noted, as for instance, in the judicious selection of rams of good quality, in the careful culling of old stock, in the separation of goats and sheep by some sheep owners, in dipping, and the like points. The herds are ordinarily under the supervision of children and women, who keep them on the move from early morning until sunset, when they are returned to the corral for the night. By constant travel over the same course much of the grazing is wasted and accounts, to a great extent, for the scarcity of vegetation in these localities. No provision is made for the winter as the herds feed on the withered grass and sagebrush, or when the snow is very deep, piñon and cedar branches are cut off for the sheep to graze on. Shearing is done in the spring and fall with

foreign shears, and some care is taken to postpone the spring shearing until the warmer months to avoid the storms of spring. During the lambing season the sheep and their young are taken to mountainous districts, or to such as offer good facilities for grazing and water, until the lambs are quite strong enough for travel.

Less attention is given to the cattle and horse herds, which are driven to the mountains where sheep are excluded. Occasionally the owner makes an inspection of them, or with some assistants visits and rounds them up for the purpose of branding them. While sheep are usually the property of the wife, cattle frequently belong to the men. Often, too, fathers and mothers divide a portion of their property between their small children, branding or earmarking the stock and their produce to better distinguish them. Branding is done after American fashion, with branding irons obtained at the agencies, or otherwise purchased from blacksmiths.

debé, a sheep; debé bichó ádini, a wether.

debé yiltsán, sheep going with young.

debé tsá'i, sheep having young ones.

debé dōlkōli, merino sheep.

tlísi, a goat; tlísi dē íli, angora goat.

debé nshtá (debé neltá, debé díneshtí), I grow sheep; belasáa, apple, hī, horse; dzidzétso nshtá, I raise peaches.

debé (bégāshi, hī), nsé: (nesá, dínesé), I nurse a sheep (with goat's milk). Discarded lambs are often kept at the hogan.

debé neyá, or ninásá, the lamb grows; debé nánshkhād (nauékhād, nádíneskhā), I herd sheep (or cows and horses).

tqānshkhād (tqānkhād, tqadíneskhā), I water the herd.

náneshkhā (nanníkhād, ndíuéskhā), I return (home) with the herd.

ántí bīnshkhād (biníkhād, bídíneskhā), I drive the herd into an enclosure.

debé baghán, a sheep corral.

debé baghán náneskhāl, the gate of the sheep corral.

yahanánshkhād (yahanańłkhād, yahanadinéshkhāl), I drive the herd into (a corral).

āyá, a tick: yā dotłízhi, blue (sheep) lice.

debé bétōd (betōd, bídotōł), scabby sheep.

debé tqánasgis (tqanségis, tqándidesgis). I dip sheep.

debé tqanágis. a sheep dip.

debé daadlō (dazdlí, dadodlól), sheep are chilled.

hakáz baghá (bīghā, bídoghāl), or hakáz nabiłtséd (nábįstséd, nabídołtsıl), the cold kills them, the sheep are frozen to death.

debé bichfchīsh. the sheep suffer from catarrh.

debé bídokhōs, they sneeze.

tqādishgyésh (tqadīgīsh, tqadīdeshgīsh), I shear sheep.

besh aqédīłi, or betqādīgyéshi, sheep shears.

tqādīgyēshgo. shearing season (in general); tqādadīgyēshgo, shearing season (when on in the whole neighborhood).

āghā. wool: debé baghá, sheep wool; debé dolkóli baghá, merino wool; tłísi baghá, goat wool; tłísi dē ılı baghá, angora goat wool; ajá'ıl, or ajá'ghā, wool of the leg.

shí shi bēdīdlíd, my brand; bēdīdlíd, a branding iron.

AGRICULTURE

In addition to sheep and cattle raising agriculture is one of the chief industries of the Navaho, and was apparently pursued by them from the earliest times. The accompanying labor, however, was shunned and usually assigned to captive slaves, so that the hastqín, or lord, might be enabled to devote his time in some noble raid or in complete inactivity. This condition, however, has undergone a complete change, the slave has disappeared to a great extent, and each family is now possessed of a small farm where corn, melons, squashes and beans are raised. Gradually, too, such products as oats, hay, wheat and alfalfa are being added to the list.

VARIOUS KINDS OF MAIZE.

nadá, corn, corn seed.

nadálgai, white corn; nadáltsoi, yellow corn; nadā dotlísh, blue corn; nadáshzhīn, black corn; nadá altqās'ái, variegated corn; nodózi, striped corn; nadálchí, red corn; nadálbái, gray corn; nadá āstlíni, freckled corn; nadákhīzh, speckled corn; nadátso, large seeded corn.

neshjáhi, sweet corn, which is also kagái, white; dotlísh, blue; litsoi, yellow; lizhíni, black.

nadá bakhá'i, male corn (grooved); nadá dijóli, female corn (a filled ear of corn without regular rows); nadást'án (?), probably with husks.

neshjáhi tso, large sugar corn, which is also called nadá nēs, long corn, when it is matured or hard.

nadá dílchóshigi, popcorn or hardened sweet corn.

dzilghá bidá, Apache maize.

destqáli, an ear with wide grooves, widely grooved corn.

dāūchān (dāchān), russet corn.

tsī nshtqéli, wide top ear of corn.

dóhnotíni, invisible cob, because it is covered with corn.

zāhāt'adi, the cavity of the mouth, corn with extraordinarily wide grooves.

PARTS OF THE PLANT

nadá bikhétl'ól (behétl'ól), the root of corn.

dāākās (nadá bakáz), the stalk.

dāākās lakhánigi, (sweet stalk), sugar cane.

bitá (bit'án), or bíhodiijil, the leaves.

bíhodiijil, the several leaves on each side of the stalk; bitá, the single leaf.

nadá bizól, the corn tassel.

dayá'án (ayá'án), unripe ear.

dā'āt'án (dāt'án), cornhusks and fodder.



bitsīghá, its awn beard); dāātsīn, an ear of corn.

dāātsīn (nadá bitsīn, corncob), the pulp of the cob.

nadá bikhétqāl, the ankle or butt of the cob.

nadá bowhókīs (?), the grooves of the ear.

lā' tlē ntī', which thrives at night, corn (sacred name).

bitsīghá dā'ichí, the awn is red; nadá yichí, the corn is red (ripening); nadá sitsābinīgān, my corn (or plants) are drying up (from the wind or drouth).

nēshjāhi, sugar corn, sweet corn (see supra).

nadá yishdé, I pick corn; ákáz yishdé, I pick corn with stalks.

áshdlād, I husk corn, or dātā yishdlād, I tear the husks off.

nadá álya, the harvest is done.

kīdishlé, I plant (anything). Planting is usually done in the months of April and May.

BEANS

nā'óli, beans; nā'óliłgaf, white beans; nā'óliłchí, red beans; nā'ólistlīni, freckled beans; nā'óliłkhízhi, speckled beans; nā'óli nodózi, striped beans; nā'óliłtsói, yellow beans; nā'óliłbaí, gray beans; nā'ólishzhíni, black beans.

nā'óli behégudi, hoe-shaped beans, lima beans; nā'óli nūmāzi, peas; bīnestá', (it is ripe), the pod of beans.

PUMPKINS AND MELONS

nāyíze (nayízi), the pumpkin.

nayízilchī, the squash; adé', the gourd.

nayízi tséi, the tail or pear-shaped pumpkin; nayízi tséi (atsae, the navel), navel-shaped pumpkin, black pumpkin with a double tip; nayízi ndestáhi, yellow, flat pumpkin.

tā nayízi, a mere pumpkin, the real pumpkin (to distinguish from others of American introduction).

lā' jīntī', which thrives during the day, the pumpkin or squash (sacred name).

nayízi bitqá'itsoi, (the pumpkin is yellow at intervals), it is in blossom.

tējiyáni (dāātēgo jiyá, eat them as they are, eat them green), watermelon; tējiyán ntlísi, hard, small watermelons.

dā'neskháni (nāneskháni, globular), mushmelons, native cantaloupes; dā'neskháni diciízhí, rough melons, American sugar melon.

nāyíze sakhád, a pumpkin plant; nāyíze bitl'ól, pumpkin vine; nāyíze bitá, pumpkin leaves; nāyíze behétl'ól its root; nāyíze bokú. or bilástsí, pumpkin seeds.

GRAIN AND HAY

tl'ó', hay; tl'ó' wái, alfalfa.

tl'ó' nadá, wheat; tl'ó' nadá bizól, wheat tassel, the sheath of wheat.

tl'ó' nánöl'óhigi, hanging down, or lí bitl'ó' nadá, oats.

WHEAT

In districts adapted to wheat raising the grain is usually sown broadcast and reaped in harvest by cutting it with a knife or sickle. Eventually the stacks of wheat are unloaded into a small corral and scattered there. A number of horses are then driven into the corral, to trample and thresh the grain, after which the straw is removed and the grain swept in a heap. The chaff is separated from the grain by collecting a quantity of it into a basket and running the grain through the fingers some distance over it, and blowing the chaff aside, or allowing the wind to do so.

tl'ó' nadá qishgyésh (qégízh, qídeshgísh), I cut the wheat.

tl'ó' nadá bichíl, the stalk of wheat; bitsós, the sheath.

tl'ó' nadá hadáditsó, wheat is ripening (turning yellow).

tl'ó' nadá digal, wheat is ripe.

tl'ó' nadá behigéshi, a sickle.

tl'ó' nadá hashká', (halká, hadeshkál), I thresh wheat.

hashchíd, (háclíid, hádeschíi), I rub the wheat (between my hands).

lí qā'éfes (qā'í'fēs, qā'ído'fīs), the horses trample the wheat.

bizhól, the chaff.

bizhól báhisöl (bâhísöl, bádesöl), I fan or sift the grain (by blowing).

bizhól bâhoshchî (bâhishélelî, bâhideshchî), I winnow.

bizhól bâashteshlě (bâashtëshla, bâashtédeshlî), I winnow the wheat.

nāsās (nsésās, ndesās), or nîkhëshkhād (nîkhéłkhād, nîkhîdeskhāł), I sew broadcast.

FARMS

What may be designated as the ceremonial way of planting is not observed to-day by many. This requires that the corn be planted in the form of a helix, winding the several rows sunwise. In the center of a large field, and facing east, the first grains are planted, followed by others a step or two east, south, west and north of the central plant in the order mentioned. The second row is continued from the northern plant so as to encircle the five plants. The men and women planting are careful to advance ahead of one another, but never outside the circle once begun. Thus the winding continues increasing the periphery of each circle until the twelfth has been reached, where the final plant is on an exact radial line with the eastern plant of the initial five. This farm is known as the circle farm.

dāākě, a farm; dāākě hótqēl, a wide field or valley.

shă'bi kégo, sunwise.

dāākě nahasbási, the helical or circle farm.

Another ceremonial farm was divided into blocks of twelve, running north and south, which must be planted sunwise. To do this the two blocks at the southern end were planted facing westward, after which the entire upper half was planted facing northward. Turning to the east, and facing southward, the lower half was then planted, finishing the circle at the point of inception. This farm was known as:

dáākē' hazlá', probably the flat or block farm, and was also called ndeltá' dáākē', the bordered farm. Other farms are called tqábâ hodisós, the silvery or speckled shore, or farm, from the variety of vegetables planted there. A place bordering on other farms was selected for this purpose.

dáākē' njokhéli, a small farm in addition to others.

al'átso, small spots of arable land selected at random.

These distinctions, however, are gradually disappearing and almost any spot, whether it be the bottom land of some arroyo or the loamy soil of a valley, is designated as dáākē', farm, whenever it is used for agricultural purposes.

dáākē' hózhōd, a clean field.

IRRIGATION

Irrigation is practiced on a small scale at points where water is available, such as the Little Colorado and San Juan rivers, Tseili, Whiskey, Chinlee, and other creeks and arroyos. Since these stream beds run dry in midsummer, the fields are completely immersed in the early spring, small banks being thrown up around the fields to hold the water. Permanent dams and reservoirs are not very common.

bīs nnæs anátī', a dirt bank enclosure, such as surround a field for irrigating. This is also called hodīldás.

ndeltá', banks intersecting a field for swamping.

dahastqá, a small plot or garden, a field divided into small squares by low banks of earth.

dádīnshtlīn, I throw up a bank or dam.

yishtlīn (sétlīn, deshtlīl), I build a wall.

lēsh altsānēheshgyēd, I dam or bank, throw the dirt on both sides; bīyā' hānīshgéd (bīyā' hanīlgēd, bīyā' hadīneshgōl), I dig under it or below.

nānīshqēsh, I irrigate or soak the ground.

tqōhashgyēd, I take out a ditch; tqōhagyēd, or tqūigyēd, a ditch; nānzhōzh, or tsé'nā' nānzhōzh, a bridge; bīyāhanī'á, a

brace, support; bíyāhanistsé (bíyāhanitsí, bíyāhadínestsí), I brace it.

tqō nlíni, a stream, or flowing water.

bokhó, a cañon or arroyo; cháshkhě, an arroyo.

chínlínigi, the mouth of a cañon, or where the water flows out.

béekid, a pool or lake; tqo siyí, a body of water, is also used for lake.

LAND TENURE

In many districts land is held in severalty by members of one or affiliated clans to the exclusion of all others. Each family selects a portion of the tract, indicating the boundary by a heap of stones, or a footpath, or a fence. Large settlements, and much less villages, are not formed, the general tendency being to live as far apart as possible. This plan is found more conducive to domestic peace and conjugal fidelity. Where small settlements are formed the ditches are common property and are maintained by the several tenants. The farm is, as a rule, property of the husband who disposes of it before death.

PLANTING AND PLANTING STICKS

In sandy soil corn is planted by means of a planting stick, which is of two different shapes. The straight stick is a branch of greasewood (duwúzhishzhín), slightly pointed. The other is a stick provided with a projecting limb just above the point and is used to press down with the foot. The small opening is made to preserve as much moisture as possible. The holes are dug by the men, followed by the women, who drop the kernels into and close the holes with their feet.

Where the soil is loamy the holes are now dug with a mattock. The value of plowing

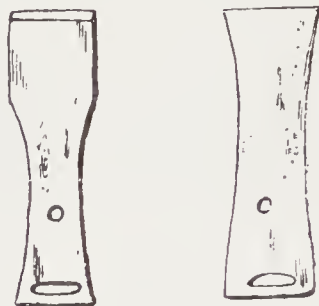


the ground is also being more and more appreciated.

gǫsh, a planting stick.

HOES

There were two different types of hoes in the earlier days. The straight hoe was made of wood hewn down to the thinness of a board, one end of which was beveled on both sides. A small hole was provided near the center of the board and a grip near the end. In operating the hoe was grasped in the palm of the right hand, passing the four fingers through the opening in the end, and the thumb of the left hand through the small hole near the center. In this manner it was scraped forward, the operator, in a sitting position, covering the radius within his reach. This hoe was called *altsǫji behǫgǫdi*, either side hoe, because it might be used that way, or because the operator might clear the ground on any side from one position.



Another hoe of the same type, and used in the same manner, was made of the shoulderblade of an elk or deer and was known as *agǫstǫin behǫgǫd*, shoulderblade hoe.

The other type of hoe was also made of wood and was used in a standing position after the manner of a scythe. It consisted of a curved blade to which a wooden handle was secured with a thong of elk (*dzǫ bakhǫgi*). It was grasped in the left hand while the thumb and index finger of the right hand passed through a thong of elk secured to the rear of the blade. This hoe was known as *nǫbehǫgǫdi*, or *nǫgo benǫhǫgǫdi*, the side hoe, or with which one hoes from the side.



At present hoes of American make are purchased at the stores and are called *behǫgǫd*, hoe.

nǫhǫshgǫd (*nǫhǫgyed*, *nǫhodeshgol*), I hoe.

GRANARIES

The ordinary hogan is not adapted to storing supplies of grain beyond the daily requirements. Accordingly, the winter supply of corn, wheat, melons, squashes, piñon nuts, and the like, is stored in pits of the shape of a wicker bottle. These are dug near the summer residence, or in the field, and the small opening is then bridged over with sticks, bark and dirt to conceal any trace of it. Formerly the digging was done with the planting stick.

núkě', underground pit, or granary.

núkě' qahashgyéd (qahógyēd, qáhodeshgöl), I dig a pit.

nadá, etc., nôöshchí (nôshéłchí, nôdeshchíł), I store corn, piñons, wheat. etc., underground.

ádä'hunsíd (áda'hunfízíd, ádá'hodesíł), I cover the pit (level it with ground).

MODERN IMPLEMENTS

The hoe and planting stick were originally the only farm implements used, but are now being displaced by modern implements with increasing rapidity.

bénahüıldládi, a plow.

níhüishdlád (níhuyéłdlád, níhudiyéshdläł), I plough.

hótłisgo níhüishdlád, I have hard ploughing, or holzhóligo níhüishdlád, easy, and gúyă'go níhüishdlád, deep, and da bakhági níhüishdlád, I plow the top of ground (say three inches deep).

bis benahatsédi (benätsédi), clod breaker, or besh nalzhódi. (dragging iron), a harrow.

bił yănähilbáli, a scraper.

bił yāneheshbāl (biłyānehéłbāl, biłyānihidéshbāl), I scrape the dirt.

lēsh beqahāłkhádi (behāłkhádi, or lēsh benāhāłkhádi), a shovel.

lēsh beqāhāłkhádi altsósigi, a spade.

lēsh beqahashkhád (beqahāłkhād, beqahídeskhāł), I shovel dirt.

lēsh beqahash'á (beqahá'á, beqahidesh'ál), I put the dirt there with a shovel, I shovel dirt.

lēsh beqahashkhá (beqahákhâ, beqáhideslkhál), I carry with a shovel, I shovel dirt.

altsádeiníni, a pick.

altsádeiníni beqáhashgyed (beqahágyēd, beqáhadeshgūl), or bena'áshgyed (benaségyēd, benádeshgūl), I dig or work with pick.

tlō' beyīlzhēhe, hay mower; tlō' nestá, hay is ripe; tlō' ntsá', the hay is thick; tlō' sagán, or bisgá, the hay is dry.

tlō' beyigéshi nnázigi, or tlō' behīlagháli, a scythe.

tlō' qishqál (qélqāl, qídeshqāl), I cut the hay with a scythe.

tlō' yishé (yíshē, deshí), I cut the hay (with mower).

(tlō') benáhüidzídí, a rake (hand or horse rake).

náhüisíd (nahuyézíd, nahodiyésí), I rake.

tlō' aqánehesíd (aqānehézíd, aqānihidésí), I rake the hay together.

bilatqái, three-tine hay-fork; biladf, four-tine.

tlō' benāljóli (benāhāljóli), a hay-fork.

tlō' aqáneheshjól (aqanehéljól, aqānihidéshjól), I cock hay, turn it up; aqāāshlē (aqā'áshla aqāādeshlí), I haul away.

tlō' bil aqánīsbās (aqán niyélbās, bil aqāndiyésbās), I haul the hay away, or tlō' nēheshqé (neháyî, nihideshqél), or tlō' aqán neheshqé (aqáneheshqé, aqáneháyî, aqānihideshqél), I haul hay away; tlō' īhishjól (iqéljól, īhidéshjól), I haul hay.

tlō' bilnfīsbās (niyélbās, nīdiyésbās), I haul away, or home.

tlō' yá'aqishqé (yá'aqáyî, ya'aqideshqél), I haul and store the hay inside (of house or barn).

bekídilyēhe, or altsádeiníni ntqéligi, a mattock.

MODERN TOOLS

In addition to the implements mentioned in the preceding, modern tools are used for repair work in general. A list of these tools is herewith given, as also a partial list of new words for modern contrivances.

bésh dotlísh, iron.

besh ntlízi, steel.

besh dítódi, cast-iron.

bésdolāghās, serrated iron,
as the edge of a saw, file, or
cog-wheel.

besh altsósigi, wire, bailing
wire.

beshādeszhái, barbed wire.

besh āqédíli, scissors.

besh be'igísi, a metal wash-
tub.

besh bikéégísi, or bakhái-
gísi, a washboard.

besh bečkěldói, a flatiron.

bitqádigísi, a washbasin.

besh náłkhádi, a sewing
machine.

tsā tsósi, a needle.

tsā tsósi benáłkhád, sewed
with a needle.

besh ānínigi, a call bell.

besh bināghoi, or bināghoi,
a clasp-knife.

besh bē'ılkháli, cold chisel.

beětsídi, a hammer.

bæechlíshi, a file.

ĩ'ādáłkháli, a nail.

ĩ'ādáłkháli altsísigi, a tack.

besh bebagháda'níli, an iron
bit.

besh bebaghádadzılnehe, a
center-punch.

nił, a stone ax.

tséníł, a modern ax.

tséníł yázhe, a hatchet.

tsě' náłaghúli, or tsě' be'-
ikáshi, a grindstone, whet-
stone.

tsínábâs yázhe, or tsínábâs
bijád dałáigi, a one-wheeled
wagon, a wheelbarrow.

tsíntqóshjē, a barrel.

tsínēheshjí, a board.

tsín qāhashjigi, sawdust.

tsín beechlíshi, a rasp.

tsín beédılkhói, a plane.

tsín bebaghádă'ă'níli, a brace
and bit.

tsín beqāhalzhíshi, a chisel.

tsín bakháhaskháligi, chips.

tsín bakhá qashkhál (sékhāl,
deshkhál), I make chips.

tsín biqá'otsēl, a log trough.

tsín beni'ichíshi, a saw.

ní'izhíhi, a sawyer.

ní'ishí (ní'iyézhī, ní'diyeshí),
I saw.

altsádashí (altsádāshézhī,
altsádadeshí), I saw boards in
two.

altsášhí (altsázhī, altsáde-
shí), I saw a board in two.

kĩnshí (kínízhī, kideshí), I
saw it off.

altqádiníshí (altqádnízhī,
altqáđineshí), I rip it in two.

altqáhi dinishí (altqáhi díní-
zhī, altqáhi díneshí), I rip
three or four strips.

do-deinīda, it is not sharp.
deinīlān, it is sharp.

do-bidēlnīda, it does not cut it.

do-shidēlnīda (nt'æ), it does not cut (for me).

do-sha'ijīda (do-sha'ijīda, do-shāādōjīda), I can not penetrate it, for instance, with a knife or nail.

tłō' ishbīzh, burlap, gunny-sack.

æ bāhoghān, clothing store.

azé bāhoghān, a drug store.

dāgha ilzhé bāhoghān, a barber shop.

tsódizīn bāhoghān, a chapel or church.

béso bāhoghān, a bank.

chā bāhoghān, a latrine.

nalyéhe bāhoghān, a store.

lējīn qagyéd, a coal mine.

tqó qahādlē, a pump.

besh tqó be ulnīgi, a pipe line. water pipe.

besh ntī', a rail track.

khúnālbāsi, a train.

besh hālnīgi (talking wire), the telegraph.

besh biyatqīgi (into which you speak), the telephone.

besh njitīgi, or tsīnābās ndzītīgi, (the iron or wagon

which moves rapidly), the automobile.

tsī'fzi, the bicycle.

jōhonā'af, a clock or watch.

tsīn dīlzhói, a sled.

tsīnlāghāl, a drum.

tsīnlāghāl benānlāgháli, a drumstick.

beēkēlchfi, pencil or pen.

bikēshchf, a drawing or print.

bēsh be bikeēlchfi, printing press, type.

nāltsós, paper, a note or book.

tsīnshdlósh, a chair.

tsīnshdlósh yiwódigi, or tsīnshdlósh nadiniwódigi, or ātla ātsīgi, a rocker.

tsīndīlnī, an organ, violin, or other musical instrument of wood.

bāēzhō, a native broom.

benahālzhói, a broom.

nahāshó (nahoshéshō', nahodeshó), I sweep.

chōhunshó (chōhunshō', chōhodeshō), I sweep out.

ākākhú', a lamp.

ākākhú' tqóigi. kerosene, gasoline oil.

ākākhú' be'itīgi, a wick.

SILVERSMITHING

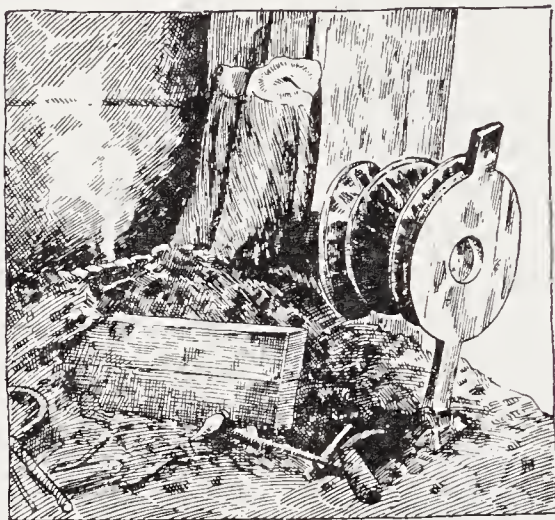
When and how the Navaho acquired the art of working metals is unknown, but there are reasons for supposing that it was introduced among them, or at least more developed and improved upon by them, since the time they have occupied their present country.

According to the sayings of some of the old silversmiths of the tribe, the art of working silver was introduced among them by the Mexicans about sixty years ago, or about the middle of the nineteenth century, when a Navaho blacksmith, known by his own people as *atsidi sani*, or the old smith, and by the Mexicans as *Herrero*, or the smith, first learned the art from a Mexican silversmith named *Cassilio*, who is said to have still been living in 1872—1873. An old silversmith, *beshlagai ifini altsosigi*, or the slender silversmith, who is still living (1909), and who at one time was considered one of the best, if not the best silversmith in the tribe, is said to have originally learned his craft from Mexicans.

The Navaho silversmith, therefor, is a comparatively modern product. Lieut. James H Simpson, who accompanied an expedition into the heart of the Navaho country in 1849, and who gives in his report good descriptions of the country and people as they then were, mentions their peach orchards, farms, herds of ponies, flocks of sheep, their beautiful waterproof blankets, etc., but has nothing to say about their artistic silverwork. The art then, as it exists to-day, probably developed since then, or within the last sixty years. In the following paragraphs a description is given, first of the tools and implements used by the Navaho silversmith as Dr Washington Matthews found them in the early seventies, and as they are to-day, and secondly of some of their work.

The tools and implements used by the Navaho silversmith are few and simple.

THE FORGE is a square structure of stones and adobe mud, built up to a convenient height, with the rear slightly elevated. The center is provided with a round, bowl-shaped depression for the fireplace. Two wooden tubes, uniting into one, and terminating at the fireplace, are walled into the rear elevation. These



A Navaho Smithy

tubes are made by carving a groove into two pieces of cottonwood, hackberry or box elder, and then fitting the pieces together with the grooves facing each other. They are usually lined inside and outside with adobe to keep them from burning or charring. Sometimes tubes of clay are molded instead of these wooden ones.

atsídkě, (pounding place), smithy.

dahăznîl, or atsídkě dahăznîl, the forge and bellows.

beêlzóli bizół, the air tubes leading to the fireplace.

khôníkkě, a fireplace.

tîs, cottonwood; jîlqázhi, hackberry; sôl, box elder.

BELLOWS are made of sheepskin. The sack is about eighteen inches in diameter, and held distended by three or more hoops

of willow twigs. One end of the bellows is firmly secured to a nozzle and fitted snugly into one of the tubes leading into the fireplace. The other end is closed up by tacking it to a round disk of wood which is provided with a leather valve in the center and two arms, the longer of which projects downward. In the original forges two of these bellows were employed, which secured an even and continuous draught and prevented the fire from being drawn into the bellows. In working the bellows, the lower or longer handle is firmly rested upon the ground, and the upper one is moved to and fro in a horizontal motion. The two bellows are compressed and distended alternately, which causes a motion similar to that with which a boy works his Irish Mail.

beēlzōli, (with which one blows), bellows.

bâs, (round like a wheel or hoop), hoop.

da'na'āťági, (that which waves or flaps), valve.

debé bakhági badidōzgö, sheep hide in sack shape.

asöl (ísöl, adesöl), I blow, work the bellows.

beēlzōli ashlé, I make a bellows.

AN ANVIL may be either a hard stone, a piece of iron from a plow or wagon, a pick head, an ax blade, a wedge or a bolt—the latter generally driven into a log or block of wood. Soft iron, like the head of a bolt, is first tempered by heating it and cooling it off in water; then the bolt is driven through an iron ring or washer into a block of wood, the ring or washer keeping the head of the bolt from working itself into the wood.

bikēētsídi, (upon which one pounds), an anvil.

CRUCIBLES for smelting the silver are made of clay and baked hard in the fire. They are about the size of ordinary tumblers, with rounded bottoms and an outward curved rim which is provided with one or more spouts. Their crucibles are not very durable, but soon become porous and brittle and fall to pieces.

Very few, if any, are made at present, as good, strong and lasting crucibles may be obtained at the stores.

THE MOLDS in which the Navaho silversmith casts his ingots or molten silver are cut or chiseled into soft sandstone, iron or wood, or they are formed of clay. They resemble as nearly as possible the article which is to be wrought out of the molten silver, and are greased with mutton tallow before the silver is poured in. The molds for silver beads are usually cut into iron or hard wood.

bġādilyfġi, (in which it is melted), a crucible.

bġyayidsġdi, (into which the molten silver is poured), the mold.

yō nšmāzi beġġġni, (with which round beads are made), or
yō nšmāzi bġġġġni, (in which round beads are made), the
bead mold.

FOR SMELTING FUEL they use charcoal, which they prepare in this manner: They build a large fire of juniper logs and branches, and after the flames have died out and nothing but a heap of glowing embers remain, they cover these up with earth to smother them, and let them cool off.

gāġ, juniper, cedar; tġesh, charcoal.

tġesh dishġġd (dġġġd, dideshġġġ), I burn charcoal.

nġstsġs (nġġtsġz, dinġstsġs), I smother, put out, extinguish.

THE BLOWPIPE is now purchased, but was formerly made by hammering out a piece of brass or copper wire, which they then bent into a tube with a curved, tapering end. This tube is used in soldering, in connection with a lamp or a wick of twisted cotton soaked in mutton tallow.

beġlzōġi beāġġdġlġġe, a blowpipe for soldering.

FOR SOLDERING they use borax, which they purchase at the stores, saliva, and silver dust. Before the introduction of borax it seems they formerly mined a certain substance in their own

country, probably a kind of native alum, for this purpose. For whitening the tarnished or oxidized silver they use tsě dokózh, rock salt, which can be easily obtained in its natural state, especially in the Zuñi country. The tsě dokózh is dissolved in boiling water and the articles to be whitened are thrown in. For polishing and smoothening they use sandpaper or emery paper purchased at the stores, which has taken the place of the sandstone, sand and ashes of former days, and buckskin. For chasing and engraving they use knives, awls, shears, files, or any sharp-pointed iron tool.

Beside the already mentioned tools they use shears, hammers, vices, nippers, pliers, tongs, punches, steel stamps, etc., all of which are of comparatively modern introduction, and can easily be obtained at the trading posts.

beāqđiljéhe, (with which one pastes, glues or solders together), borax.

bikě'nfli, (which is sprinkled on), borax, or any powder used in soldering.

tsě dokózh, (saline rock), rock salt.

bīna'ilgáhi, (in which one whitens), bowl, dish or receptacle used in soldering.

sai, sand; t'esh, ashes; abáni, buckskin.

nāłtsós beěchłíshi, (paper with which one rubs off), sandpaper.

nāłtsós beěshchłísh (bē'fclīzh, bē'ādeschłísh), I sandpaper.

yishgā (y'lgai, yideshgā), I whiten; ná'ishgā, I whiten again.

adishkhó (adłkhô, ādideshkhól), I smoothen, polish.

néidishkó, I smoothen, polish again.

besb, knife; tsā, awl; besb āqédłli, scissors; besb āqédłli tso, shears; beěchłíshi, file; beěchłíshi bídazneskánigi, three-cornered file; beěchłíshi nīyísigi, round or rat-tail file; beěchłíshi ntqéligi, flat file; beěchłíshi ntsāsigi, large file; ashchłísh (āshāclīzh, adeshchłísh), I file; yishchłísh (y'fchīzh, deshchłísh), I file it; nadishchłísh (nadfchīzh, nádideshchłísh), I file off; biyfdéishchłísh, I file inside, inner surface; beətsłdi, hammer; beətsági, pliers; beətsági tso, vice; beətsági beyāyikháhi, tongs for taking crucibles out of fire.

beotsági khó' benajáhi, tongs to take fire with.

atqáshjā be'il'íni, (with which eyelets are made), small button pliers; beāghádā'ā'níi, punch; bikíji āghádā'ā'níi, or bikíji āghádā'ālyéhe, a piece of iron with a hole in it, which is used as a set punch; beāghádā'ālyéhe, auger; bijiqáilkháii, bowl or vessel used to put in filings and other waste material; tsě dokózh bina'níi, bowl or vessel for the tsě dokózh; tsě dokózh bizís, sack or receptacle for the tsě dokózh.

begēlchíhi (beēkēlchíhi), stamp; beāghádadiltqázi, drill.

The Navaho have no silver mines in their country but purchase Mexican silver dollars, which are worth from forty-five to sixty cents of United States money. These Mexican silver dollars, or smaller coin, are either molten and molded, or cut and hammered into the desired ornaments and trinkets. Frequently, too, United States silver coins, dimes, quarters and half-dollars are used.

Before silver was plentiful copper and brass were used instead, and were purchased at the trading posts in the form of wire or small sheets, or taken from kettles and pans issued by the Government, or bought from the whites.

béshlāgai, silver.

besh hichí, copper.

bésh litsöi, brass.

nāākhai bebēso, Mexican silver coin.

belagāna bebēso, American silver coin.

béshlāgai qāgyēd, a silver mine.

béshlāgai qashgyēd, I mine silver.

béshlāgai nishgá, I heat it.

béshlāgai ntqēl āshlē, I flatten silver.

béshlāgai āqidishjé, I solder.

béshlāgai dishqf, I melt it.

béshlāgai yistsíd, I hammer silver.

béshlāgai ginshné' (kínshné'), I cut silver.

béshlāgai nahashní, I buy it.

béshlāgai beādilyfhi bīyas-síd, I pour silver into mold.

béshlāgai nāzbâs āshlē, I cut silver into circles.

béshlāgai nāzha āshlē, I give it crescent shape.

yilkíd, ridged.

béshlāgai dzíldsīs āshlē, I
give it a semi-tubular shape.

bīhaltšá, bowl-shaped.

alkésgis, twisted.

béshlāgai yijf, oxidized or
blackened silver.

béshlāgai na'ilgá, whitened
silver.

béshlāgai ndilkhó, polished
silver.

béshlāgai dolyf, molten sil-
ver.

béshlāgai nabadótsēd, ham-
mered silver.

ba'na'chízh, dust, filings.

After having supplied himself with a sufficient quantity of silver, and made up his mind as to the size, shape and design of his projected work, the silversmith bends his whole energy upon his task. Frequently he receives orders for special articles, trinkets or ornaments from the traders, who submit to him the shapes and designs required, otherwise he works out and follows his own plans and designs, or copies them from other work.

béshlāgai dsítsíd, silversmithing.

béshlāgai yítsídi, or béshlāgai i'íni, silversmith.

béshlāgai yítsíd, I pound silver, I am a silversmith.

béshlāgai ash'f, I make silver, I am a silversmith.

atsídi, a smith; astsíd, or yítsíd, I pound, hammer.

ntlíz āshlē, I harden, temper.

One of the most curious and interesting, and at first sight, most puzzling pieces of work wrought by the Navaho silversmith, are the necklaces of silver beads. These beads are round and inwardly hollow. They are of different sizes, and so arranged that the top beads, or those resting on the neck or collar-bone, are quite small; they gradually increase in size until those resting on the middle of the breast are almost one-half inch in diameter. When seen and examined for the first time one wonders how these savages manage to manufacture these neat silver, hollow globelets.

In the making of these silver beads different methods are employed by different smiths. One of these methods is the

following: The smith takes a Mexican silver dollar, or any other silver coin, and beats or hammers it out until it has the required thickness, or rather the desired thinness. This sheet of silver is placed upon an iron die, into which holes of various sizes have been made. These holes go all the way through the die and are slightly funnel-shaped. An iron punch, usually consisting of a bolt with one end rounded off hemispherically, is set square over one of the holes and struck with a hammer. The strokes with the hammer force the silver into the hole, the rounded end of the punch give it a hemispherical shape, and



since the punch is not thin enough to be driven into the hole, it cuts off the hemisphere with a fairly even edge on the rim of the hole.

When taken from the die or matrix the edges of the hemispheres are smoothed and leveled down with a file, and then per-

forated by driving the point of a file or other iron tool through them. Two are then strung upon a wire, the concave sides are fitted together so as to form a globe, which is wrapped with some very thin wire, and the seam is then soldered with borax, saliva, and silver dust.

When arranged upon a string or thong, each necklace contains from fifty to sixty—the finer, smaller specimens often number as many as one hundred beads. Usually they have a large crescent-shaped pendant in the front center, and in the lower half of the strand small silver crosses, and other flower-like ornaments are strung after every second or third bead. Necklaces of this kind are very much prized by the Navaho, and are certainly very ornamental.

yō nūmāzi, (round bead), silver bead.

beyijihāidadsīlnéhe, (in which it was struck, cut out), matrix.

behāidadsīlnéhe, (with which it is struck, cut out), bead punch.

bedajishné, I strike or cut out.

yō nūmāzi āshlé, I make silver beads.

yosdīsi, oval-shaped silver beads.

nāzhāhi, crescent-shaped pendant; chīl bitān, flower-like bead.

tsīn ālnāōzīd, cross-shaped bead; nāhokhōs, swastika pendant.

besh tsōsi bikīdesdīs, I wind thin wire around.

yō yish'ésh, I string beads.

The simplest kind of silver ornament made by the Navaho silversmith is buttons. Of these the most common form is the



silver hemisphere described in the preceding paragraph, with an eyelet of copper wire soldered underneath into the cavity. Fre-

quently an eyelet is soldered on to a dime, quarter or half-dollar, and the coin used as a button; sometimes the coin is rounded into a hemisphere with the imprint of the die left perfect. From plain to ornamental buttons is but a short step. The simplest design is a star, which is obtained by filing a number of concentric rays upon a button. Outside of this, buttons of every size, shape and design are made, some of really tasteful and artistic workmanship. The Navaho makes a much more extensive use of buttons than his white, civilized brother. They do not suggest button-holes to the Navaho, but are almost exclusively used for the purpose of decorating. Moccasins, leggings, belt, pouch and pouch strap, pistol holster, gun scabbard, saddle skirts, bridle, coat, vest and hat are ornamented and set off with them.

yō nłchíni, button; ʔalaí dotłísh yō nłchíni, a dime (quarter, half-dollar) button; yō nłchín dahatsós, a cone-shaped button.

yō nłchín náʔdesghās, button with concentric rays.

yō nłchín deshzháhi, several buttons of slender, pointed, oval shape, joined together. Used for moccasins.

qáhídamæz, oval; qáhāshchī, pointed; násbās, round.

dákha náhālín, card-shaped, square.

nasdænæz, form of a parallelogram, elongated square.

A favorite silver ornament, worn with much pride and show, are leather belts, upon which are strung from ten to twelve

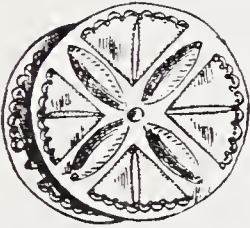


plates or disks of silver. These disks are usually of oval shape, have a scalloped edge, are slightly arched in the center, measure about four and one-half inches in length and three inches in

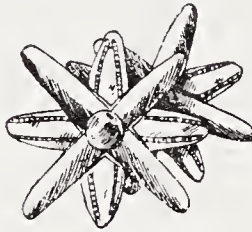
breadth, and are often beautifully chased and engraved. The belt is closed in front with a large, highly ornamental buckle. Each disk averages about three dollars in weight, so that a belt of this kind often contains silver to the value of forty dollars or more. On the lower side of each disk one or two cleats of copper wire is soldered for passing through the strap.

sīs, belt; bečhčīdīdlō, buckle.

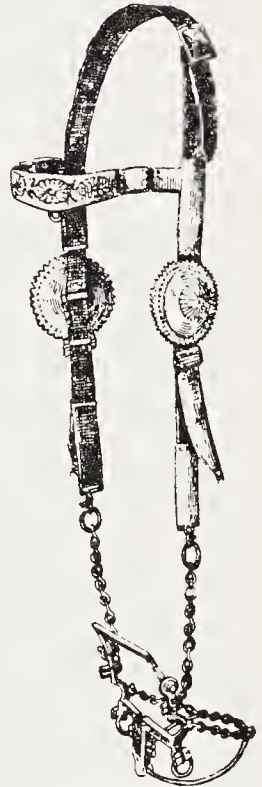
Silver headstalls were formerly manufactured quite extensively and are not particularly handsome, but costly and showy. They consist of broad bands of silver, large and numerous enough to almost entirely conceal the leather, with more or less heavy pendants dangling on the cheek straps, and



Conchas



large conchas or bridle buttons at each side of the brow band. These bridles cost from twenty-five to thirty dollars, or their equivalent in sheep, ponies, or other stock.



Silver Bridle

āzātī' bēshāgai, silver bridle; ānītīōl, silver bridle.

ātqā sētqāni, brow band.

ātłā sīnīl, or āzātī' bitłā sīnīli, concha, bridle button.

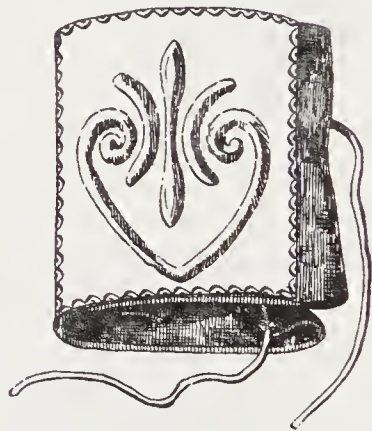
The most popular forms of jewelry are bracelets and rings. The wristlet of leather, worn on the left wrist, is now frequently ornamented by a silver disk or plate of from three to four dollars

in weight, some of which are real works of art. Bracelets, too, are strictly ornamental, and are made in multifarious shapes and designs. There are simple round circlets, usually tapering a little toward the ends, and marked with file cuts; others are made



Bracelets.

of a triangular bar of silver, bent in a circle, which leaves a sharp ridge in the center, *alnf yilkid*; or of a square bar with a groove along the center, *alnf yildzīs*; or a flat plate in the middle with a slender piece on either side to encircle the wrist, *alnf gintqēl*; others are double or triple ridged, or consist of two or three ridged circlets joined or soldered together; then there are flat silver bands of diverse breadth and thickness, weighing from one to three dollars, some marked with file cuts, indentations, scallops, leaf-like, and a variety of other shaped figures, often executed and arranged with a taste and skill that would reflect credit upon any one of our eastern silversmiths. Bracelets are worn upon both wrists, sometimes two and more on each wrist. The two ends of the bracelet are not brought together but a space of about an inch is left open; the wrist is pressed sideways through this space, and with a twist the bracelet is brought about the wrist and squeezed to fit.



Wristlet

ket'ó, wristlet; látsīni, bracelet.

béshlāgai látsīni, silver bracelet; besh lichí látsīni, copper bracelet; besh litsōi látsīni, brass bracelet.

látsīni ntqél, broad bracelet; látsīni altsósi, slender bracelet.

látsīni nfyis, round bracelet, made of a round bar.

látsīni alnf yildzīs, grooved bracelet.

látsīni alnf gintqél, a bracelet broad in the center.

látsīni alnf yilkid, a bracelet ridged in the center.

látsīni ne'etsé, a bracelet with two or more ridges, in one piece.

látsīni aqéshjē, two ridged bracelets soldered together.

látsīni aqdashjē, three ridged bracelets soldered together.

látsīni aqānā'á, two ridged bracelets soldered together at a few points, leaving for the greater part a narrow space or slit between them.

látsīni aqādanā'ā, three bracelets soldered together in the preceding manner.

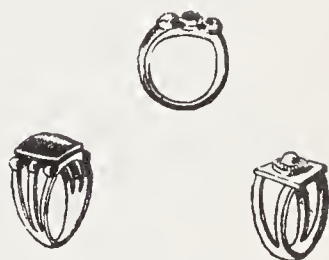
látsīni tlīsh beélyā, a bracelet made in the form of a snake.

látsīni alkésgiz, a twisted bracelet.

látsīni bikeëshchīni, a bracelet with a design.

látsīni do-bikeëshchīni, a plain bracelet, without design.

Finger rings are, perhaps, more in use than bracelets, and their variety as to size, form and design is astonishing. Like the Navaho blanket, no two rings seem to be exactly alike. The men, as a rule, are content with one or two rings, but the women frequently wear a half-dozen on each hand.



yostsá, a ring; besh lichí yostsá, a copper ring.

yostsá áshlé, I make a ring; yostsá deshzházh, worn down ring.

yostsá geéldô, a broken ring; yostsá énīdi, a new ring.

yostsá qastqí, an old ring; yostsá ntqél, a broad ring.

yostsá altsósi, a slender ring; yostsá ntsá, a large ring.

yostsá altsísi, a small ring; yostsá ná'ilgai, a polished ring.

yostsá yijí, a blackened, oxidized, tarnished ring.

yostsá do-bikeëshchíni, a plain ring.

yostsá bikeëshchíni, a ring with a design.

yostsá alkésgiz, a twisted ring, made of slender silver wires twisted and soldered into something like filigree work.

yostsá bitsá, a ribbed ring, made of several slender wires brought together on the lower side.

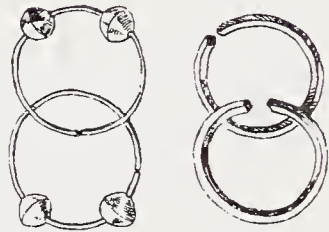
yostsá tsésô biná', a ring with a glass setting.

yostsá dotlízhi biná', a ring with a turquoise setting.

yostsá biná', the set of a ring.

yostsá tlišh beélyä, a snake-shaped ring.

Earrings are worn exclusively by men. Silver earrings consist of a smooth piece of silver wire slightly tapering toward the ends, bent into a circle of about one inch and a half in diameter. A sliding silver bead is frequently strung upon this kind of earring, and sometimes this bead is flanked by two smaller beads.



Beside these, many other ornaments are made of silver, such as single and double crosses, stickpins, buckles, hatbands, tweezers, etc. Spoons, forks, butter-knives, sugar-shells, etc., are of very recent introduction, and are made for the whites. Rings, belts, bracelets and pendants are often set with turquoise, garnets, peridots and other stones, and with glass. This, too, is a comparatively recent innovation.

jāghănā'āhi, a silver earring.

jāghănā'āhi yô nūmāzi bæ (or bil), a silver earring with a bead.

chā' bināztī, a hatband.

dāgha beyi'nízhí, tweezers, (with which the beard is plucked out).

béshlāgai adē, a silver spoon.

The Navaho silversmith is quite fertile and inventive with regard to forms, shapes and designs, or perhaps we should call

him a deft and clever imitator or copyist. The different designs on his silverwork are as numerous and varied as those in the blanket woven by the women. A description of his work will hardly do it justice, it must be seen and examined in order to be rightly judged and appreciated. Most of the names of figures and designs in the following list have already occurred in some of the preceding paragraphs.

ch'il bit'án, plant leaf.	at'á, feather.
názhāhi, pendant.	nūmāzi, globular.
dahitqá, crescent-shaped.	dákha nāhālīn, card-like.
só tso, big star.	qáhidænæz, oval.
só tso deshzhá, big-pointed star.	nasdænæz, parallelogram-shaped.
dólāghās, serrated.	deshzhá, pointed, bristly.
tīsh beēlya, snake-like made.	qábashchī, elliptical.
názbās, round.	dahatsós, conical.
názha, pronged.	ná'desghās, a pattern with concentric lines.
dzildsīs, semi-tubular.	beēkelchīhi, steel stamp.
yilkīd, ridged.	bikeēshchīni, with a design.
ne'ětsé, with several ridges.	do-bikeēshchīni, plain, without a design.
bīhaltā', bowl-shaped.	yostsá āshlē dí bikhē'go, I make a ring after this design.
alkésgīz, twisted.	
nfyiz, round (like a stick).	
bitsá, ribbed.	

POTTERY MAKING

Unlike most of the neighboring Indian tribes, the Navaho are not conspicuous as potters and make a very rude and inartistic kind of pottery, which in every respect is vastly inferior to that of the Pueblo. Their traditions, however, point to a time in which pottery is said to have been in nowise inferior to that of the Pueblo with whom they lived. With the exception of cooking pots other fabrics, such as waterpots, waterbags or bottles,

bowls and earthen spoons or dippers, were all beautifully decorated with figures of birds, rainbows, deer, antelope, rabbits, ducks, cloud effect (*kös ishchín*), or any figure not tabooed, as snakes, lightning, bear, badger, hawks, and the divinities.

As in the decoration of the basket, so also the decorative line encircling the body of the pot was left open for the reason that the potter, like the basket weaver, supposedly encircled herself with this decoration and, lest she trifle with her life, must not close this circle about her, but leave an exit for herself.

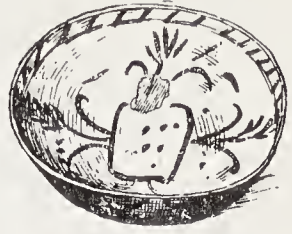
The early waterpots were shaped much like the wicker bottle, with two loops or eyelets on the sides, and were similarly carried on the back. One side of the rounded body of the pot was made flat so that in carrying it might rest better. These waterpots have now entirely disappeared, though the legends speak of the white, blue, yellow and dark waterpots for conveying the sacred waters of the cardinal points.

The water bottle was provided with a loop, or finger handle, near the neck, so that it might be conveniently grasped in pouring out its contents. They were shaped much like an ordinary pitcher, omitting the spout and handle, and with a narrower neck than that of the waterpot. Later they were entirely abandoned and displaced by bottles purchased from the Hopi and other tribes whose fabrics, though slightly differing from the Navaho ware, were found just as serviceable. Of these many were provided with an additional loop near the bottom of the bottle so that it might easily be suspended from a cord and carried in traveling. Some maintain that the Navaho never made water bottles but always purchased them from the Pueblo. Early history and tradition, however, discredit this strongly, though at present Navaho made water bottles are very scarce.



Earthen spoons or dippers were in shape like the gourd ladle, and were, like it, used for the purpose of dipping out liquids.

The bowl would seem to have been a substitute for the basket at the home. Its name, *letsā'*, earthen basket, indicates both its shape and purpose.



While all of these were ornamented with beautiful figures, the *āsā'*, pot, was completely devoid of ornamentation since it was used for cooking purposes, and in the preparation and boiling of dyes or medicines. No particular care was taken to form them shapely, and though made in different sizes, all were made after the same pattern with rounded bottoms, a hardly preceptible neck, and a slightly flaring rim. A serpentine line, or a few scallops along the outside rim, in addition to depressions made into the body of the pot with the finger or a stick, were the only decorative features about these pots, which in substance remain unchanged to this day.*

The crucibles now in use by the silversmiths of the tribe are in effect cooking pots in miniature, and are provided with one to three spouts at the rim for pouring the molten silver into the matrix.

The ceremonial pipes are conical in shape, and stemless, as the smoke is drawn through a small hole provided in the bottom of the pipe.

This comparatively small variety of pottery made by the Navaho, and their apparent indifference to the art, finds a ready explanation in the great facility with which more shapely and serviceable pottery could be obtained from the neighboring Pueblo Indians. More recently, too, brass, tin and enameled wares promptly found favor with them as far superior to, and less difficult to acquire, than the native or extra-tribal pottery, so that comparatively little earthenware is used at present.

*See illustration on page 218.

Pottery making is a woman's industry, and to-day the Navaho potter may still be found among the older women of the tribe. As the molding and drying process require a large amount of attention and care some unoccupied hogan, or other secluded place, is selected, where the potter might be undisturbed. As a material for most earthenware, a very sticky mud and white clay are used, which may be found almost everywhere, while for the pots a blueish clay, which in certain localities may easily be dug out, is preferred, and from its use in making pots is known as pot material. Small pieces of broken pottery, with which the Navaho country is in places fairly strewn, are crushed and ground to a fine sand, and added to the clay. The whole is then mixed with water and thoroughly stirred until a stiff mud of equal consistency throughout is obtained. A lump of this mud is then taken between the hands and rolled out into long, slender pieces, or ropes; this done, a flat, round cake of the desired circumference is made of a lump of the mud, and serves as the bottom of the pot around which one of the rolls of mud is wound and made fast by pressing and gently kneading with the fingers. A vessel containing water is kept near by into which the fingers are occasionally dipped to prevent the mud from clinging to them, as also to prevent the finished work from drying too rapidly. Another roll is added and fastened in the same way, by which process the potter is enabled to give the pot the desired shape and size.

The molding completed, the whole is then thoroughly smoothed by rubbing the exterior with a corncob, while the back of a gourd dipper is used in smoothening the interior surface of the pot. When still moist small indentations are made in the body of the pot with the thumb or a small stick, and such scallops made around the rim as strike the fancy of the potter, who at times substitutes a narrow serpentine line made of thin strips of mud. No other decoration is added. The whole is then covered with a coating of gum to further its density, after which the pot is placed over a slow fire, made of sheep or cow dung.

and allowed to remain there for several hours until thoroughly baked, after which it is ready for use.

After baking, the pottery (excepting cooking utensils) was decorated with colored figures, the color being applied with a brush of yucca fiber, and prepared from black, red, yellow and white clays or earths, mixed with water. This, however, has long since been discontinued as too tedious.

The cooking pot is still largely in use, both for domestic and ceremonial purposes. In the well-known war dance the pot is quickly converted into a drum by stretching a piece of goat-, sheep- or buckskin across the mouth of the pot and securing it just below the flaring rim. This is tapped with a small round stick producing a dull sound which is kept up incessantly during the entire dance. The earthen pot is also required in the preparation of medicines productive of emesis in the course of some ceremonies.



LIST OF WORDS

tqósā', or tqóāsā', the water-pot.

tqózīs, the water bottle.

tqózīs yázhe, small bottles or cups.

qashtlísh tqózīs, earthen water bottle, designates the Hopi or Pueblo ware.

lētśā', earthen bowl.

hashtlísh adě', earthen dipper.

bīadilyfhi, in which it is melted, ercible.

nát'östśé', pipe.

ásā', cooking pot.

(ásā') bīkēēshchí, it is decorated.

lējín, black earth.

letsói, yellow earth.

dlēsh, white clay.

chī, red clay, which were used in the preparation of the colors.

ásā' yāzh, a small pot.

ásāltsoi, a brass kettle.

ásā' bīdāgi, the spout of the pot, also its rim.

ásā bitlāhi, bottom of pot.

ásā' tľā'i, the half (broken) pot.

nfyíz, round, (a slender, tapering object).

númăz, globular.

bitsé hulóni, the skillet, or griddle.

bes'ésā' (bes'ásā'), a bucket, pail, kettle.

tsín ásā', a wooden (candy) bucket.

tsítsā' (tsíntsā'), a wooden box.

naaldóni, large oil cans.

naaldó, it sounds (like a drum).

ásā' tqéli, wide pots, large Hopi pots used for cooking purposes.

ásā' ashľé, I make a pot.

ásā' al'f, pottery material, a blueish clay.

hashtľish ditsídigi, sticky mud, mud which clings.

ásā' al'f qášoyéd (qágyéd, qádeshgól), I dig out clay.

khítsil, or ásātsil, broken (ancient) pottery.

anā'ásā'i, bits of ancient pottery.

ásātsil nāhashľá (naháľā, ná-hideshľá). I gather broken pottery.

ásātsil yistsíd (yítséd, destíľ), I crush broken pottery.

ásātsil yishká' (yíká', desh-kál), I grind broken pottery.

khítsil ásā' al'f biľ tqáóshní' (tqaiséni', tqáideshni'), I mix broken pottery with the pottery clay.

nisqís (níľqís, dinésqís), I roll (mud) between my hands.

nānesní', it is kneaded.

nānshní (nanéni' nadínesh-ní'), I squeeze it.

ásā' biyó', the scallops, or decorative serpentine line on the pot.

ásā' biyó áshľé, I make the scallops on the pot.

ásā' yishjé' (shéjé', deshjá'), I coat the pot with gum.

jé', pitch, gum.

díľkhó', it is smooth.

qǎ'áshtľé, it is moistened thoroughly.

nadá bitsín, the corncob.

dówóligi, indentations made with the fingernail.

bégǎshi, or debé bichá, cow or sheep manure.

ásā' yistés (séľt'é', destís), I bake the pot.

bikeëshchf ádín, without decoration.

chóhótĩ' nlí, an exit is left (on pottery decoration).

bitqášhjǎ', the loops on the waterpot and water bottle.

See Wickerwork for words relating to transportation of them.

ásā' yish'ál (nä'á', desh'ál),

I carry a pot (in my hand).

ásā' nash'á' (nä'sá'á', ndesh-
'ál), I carry, pick up a pot.

hashtlísh ásā', earthen pot.

ásā' bēltqázhi, the pot-drum
stick.

ásā' dādestl'ó', the pot-drum.

ásā' dādishtl'ö (dádætl'ô, dá-
dideshtl'ól), I tie the pot (with
a skin).

ásā' yishqál (yílqál, deshqál),

I strike the pot-drum.

ásā' yishdôn (yíldôn, desh-
dól), I sound the pot-drum.

ásā' yishtqâsh (yíltqâzh,
deshtqâzh), I tap the pot-drum.



BASKETRY

Singularly enough, the number of Navaho basket weavers is very limited. Yet their fabric is superior in strength and durability to that of the neighboring Apache, Coconino, Pueblo or Pima, and no apparent effort was ever made to displace the native basket by the products of other tribes which offered a larger variety in design and shape. The Paiute alone conformed to the requirements of Navaho ritual, and make a basket which in design, shape and texture is identical with the native patterns. Apropos of this coincidence, many hold that the Paiute borrowed the art from the Navaho, as previous to their association with the latter their textile industry was confined to a rudely constructed wicker bottle (tqóshjē). Some also advance that the

Navaho basket is recognized by the sewing of the final stitches, which the Paiute can not accomplish, and therefor distinguish between baskets of Navaho pattern made by the Paiute (báyodžín bitsá') and those made by the Navaho (diné bitsá'). Others consider them identical in every particular, an opinion which is favored by the use of the Paiute basket in any ceremony. But leaving such questions aside, it is apparent that, for reasons of their own, the Navaho are perfectly agreeable to the competition of their neighbors among whom basketry flourishes sufficiently to allow the Navaho weaver to retire.

Basketry is a woman's industry, which is also pursued by the nádle (he changes), hermaphrodites, or men skilled in the arts and industries of both men and women. Basketry, however, is not classified with textile fabrics (yistló), but with sewing (náłkhăd). It is of interest also that, while the basket is in progress, the sewer is untouched and avoided by the members of her family. The material, too, of which the basket is made is placed beyond the immediate reach of the household. Finally the sewing is accomplished with the utmost expediency, and is undertaken by skilled sewers only. Should an unskilled person tamper with this occupation, it is believed that sickness and rheumatic stiffness affects the wrists and joints. This is remedied by the singer who, in the course of a ceremony, clothes both arms of the patient with the skin of a fawn (bí' yázh), whereupon a hole is broken into the south side of the hogan through which the patient extends her hand and wrist. As soon as the wrist appears on the outside, her younger sister takes it between her teeth, pressing them lightly into the skin, which supposedly removes the stiffness (nasdó'). At present this rite is rarely necessary, but suggests a reason for the taboo (bahădzid) placed upon anything connected with basketry; and for the readiness with which the Navaho decline to pursue the industry.

The dimensions of a basket often exceed twelve to fourteen inches in diameter, and are usually a fraction more than three inches in depth. As a material, the twigs of sumac (kî, or chł-

chñ) are used. A triple incision is made into the butt end of the twig, one part of which is held between the teeth while the other two are torn off with the fingers. Each part is then scraped clean of its bark with a knife or piece of tin, and the twigs to be dyed are laid aside in a heap, while the natural color of the twig furnishes the lighter shades of the designs.

The dyes used are identical with those used for coloring wool, though, obviously, the mordant of boiled sumac leaves (kī) becomes superfluous. Cedar ashes supposedly add luster to the color and contribute to its adhesive quality. Black was obtained from surface coal (lējñ), added to boiling sumac leaves (kī), or from a sulphurous rock (tsékhô), slightly roasted (iltēs) with pine gum or rosin (jē'). When ready this was added to the boiling twigs giving them a lustrous black color similar to charcoal (tēs̄h nahālñ). The root of juniper (gād behétlōl) and mountain mahogany (tséēs̄dāsi behétlōl) are boiled together, after which the ground bark of alder (kīsh yikāgo) is added to obtain a pale red, into which the twigs are immersed. At times the joint fir (tlō' azēhi, *Ephedra trifurcata*) is substituted for alder bark, while cedar ashes add luster to the color.

Blue was frequently obtained with indigo, though a native blue is also prepared from a blueish clay or ochre called ādish-tl̄ñsh, which is pulverized and mixed with water. Various shades of yellow are obtained with plants like *Bigelovia* (kītsōi), the sneeze weed (nāēshjā ilkhēi, *Helenium Hoopesii*), or the sorrel (jātñni), the flowers of which are crumpled and boiled, with cedar ashes thrown in. (Cf. Weaving.)

The dyeing done, the twigs, both colored and uncolored, are placed in water to render them moist and pliable. The butt ends of the first twigs are wound around a small stick known as the bottom of the basket, and secured there with yucca. An awl, made of deer-bone (bñ' bikhétsñ), is now used in sewing the basket for which an iron awl is found impracticable. The sewing is always done *sunwise*, or from left to right, giving the basket the shape of a helical coil when finished. Much deftness

and constant application are required to obtain a close weave which will hold water after a few minutes moistening, while baskets of inferior quality require moistening much longer.

The designs are, of course, woven with the colored twigs. Yellow and blue, however, are now rarely used, and the usual pattern is a band three to six inches wide, woven with zigzag edges in black with a line of red running through the center, and set, as it were, on a light background made of the natural color of the twig. Or, this band is sometimes displaced by a set of four or more square figures woven at intervals, with a colored circle entwining the lower part of each square. The colors in this and the first pattern might be distributed at will, and the colored band of the first pattern might be increased to two or more according to taste. Both patterns are designated as *tšā'*, basket, without reference to their designs. Of the two extinct patterns, the *tšā'* *netšě'*, or coiled basket, presented a design of vari-colored coils following each other, while the *tšā'* *hókhāni*, or basket of enclosures, presented a set of four triangles whose apices rested on the center or *bottom* of the basket. From the base of each of these triangles three squares, increasing in width, extended to the rim of the basket, giving the whole design a shape similar to the Maltese Cross. While no special rules were laid down with regard to the blending of colors, or the number of figures and circles in a design, it was essential that every design be broken or intersected by a line of uncolored twigs. In baskets with circular designs this was comparatively easy, but in the *tšā'* *hókhāni*, or basket of enclosures, it was found necessary to intersect one set of squares in order to make this line quite apparent. It was therefor called *qáātqīn* (*qáttqīn*), the way out, or *chóhóťi'*, the line leading out, and was prescribed lest the sewer, in bending all her energies and application upon her work, *enclose* herself and thus lose her sight and mind. A parallel is found in overdoing weaving, singing, in amassing a fortune, or in the opening left in the figure of the queue and bow. (Cf. War Dance.) This intersection always runs in a

radial line with the close of the seam on the imbricated rim of each basket, which in turn serves as a guide in the directional assignment, as the close always faces eastward. Hence the singer always looks or feels for the closed rim, designated as *bidá' ästl'ó*, where the rim is woven (instead of sewed). The details involved in mending this rim, as well as the taboo placed upon the wearing of a basket as a headgear, the legends of the origin of the basket, and relative subjects, are beyond the scope of the present work. Suffice it to say, that the basket is made exclusively for ceremonial use, and is an integral part of every rite, as none is holy (*diyfn*) without it.

The strength and elasticity of the Navaho basket renders it serviceable as a drum, in other words, *it is turned down* and beaten with the drumstick. Should it be *turned up* again before the close of the ceremony, it indicates that the singer has suspended the continuation of the ceremony. The basket is also used as a receptacle for the rattles, prayersticks, stones, herbs, medicines, and like ceremonial paraphernalia. The ceremonial bath is administered in the basket. The mask of the Fringed Mouth (*záhadolzhäi*) is supported on a basket from which the bottom has been cut out. At the marriage ceremony a new basket is required in which to serve the porridge. As it is frequently impossible for the couple to consume its contents, the basket is passed around to the visiting guests. Whosoever consumes the final portion of the porridge also takes possession of the basket, wherefore baskets thus obtained are designated as *tšä' na'obáni*, or the basket which was won. It is otherwise referred to as *danákhān bī'odáni*, the basket from which they eat the porridge. The so-called wedding basket is therefor unknown.

In the early days baskets were woven of yucca braid. The pith of the yucca leaf was extracted and dyed in the same manner as sumac twigs to-day. It was also permissible to use the designs of the basket in the decoration of the uppers for moccasins made of yucca.

The remnants of twigs used for baskets are employed in constructing the so-called owls (*nëshjā*). Cf. Bugaboos.

WORDS REFERRING TO THE BASKET

tsā', the basket; *tsā'* *nëshkhād*, I sew or make a basket.

kī, or *chīlchīn*, sumac.

kī qashā (*qasēyā*, *qadeshāl*), I gather sumac twigs.

tsāzī' ntqēli, yucca (broad-leafed); *kīsh*, alder.

kī yīlzhī, blackened sumac (for dark color).

kīsh beyilchī, reddened with alder.

bakhāgi bāhishē (*bāhīshē'*, *bādeshī'*), I scrape the bark off.

kī yīshdlād (*yīldlād*, *deshdlāl*), I tear the sumac (in strips).

tsā' bitlāhi, bottom of basket (center of helix).

nāhinestšō', helical (coil); *bidā' astlō'*, imbricated (woven) rim.

bidā' ashtlō (*sēhtlō*, *deshtlōl*), I close (weave) the rim.

nāshchā, a design (in basket).

nōltlīzh bikeëshchī, zigzag (line) design.

tsā' alnī na'ichī, red line in center (of basket).

qātqīn, the exit, the intersecting line of the design.

nādle, a man performing woman's work.

nāltlōgo, or *nālzho*, moistened with water.

tqō do-baghāgyēd-da, water-tight, water does not flow through.

tqō bakhādāhāzlin, it leaks, water flows through.

tsā' nāshlē (*nsēltlē*, *ndeshtlō*), or *tsā' nāshō* (*nshēsho*, *ndēsho*),

I moisten the basket.

tsā' aqēstqī, the basket is tightly woven, or *tsā' aqīnestqī*, a tight basket; *tsā' nāneszā'*, a loosely woven basket.

tsā' yāsetqā, the basket is down, or *yānādaātqī*, the basket is turned down.

tsā' yānshtqī (*yā'ntqā'*, *yā'ndeshtqīl*), I put the basket down (for the drum), hence, *tsā'*, the basket drum.

tsā' yīshkhād (*yīkhād*, *deshkhāl*), I strike the basket (drum).

tsā' bēyikhād, the drumstick, which is made of *tsāzī' ntqēli*, broad-leafed yucca; *tsā' bēyikhād ishlē*, I make a drumstick, or rather *tsā' bēyikhād bikīdīsdiz* (*bikīdāēdiz*, *bikīdidesdīs*), I wind

the drumstick. The yucca is wound around two folded yucca leaves in about four sections. The ends of the winding string are secured within the folds and corn pollen is inserted; *tšá' bēyikhād nadá azé bitqá'ilě*, medicine of corn inserted in (or fed to) the drumstick.

tšá' bitqádaagis biniyě', basket for bathing (ceremonial).

tqá'níl tšá' bīhīkhá, mush put into the basket (for the nubility ceremony); *bīhishkhá* (*bīhīkhá*, *bīdeshkhál*), I put into a receptacle; *tšá' tqá'níl bēsákhâ'*, the mush is (now ready) in the basket; *tqá'níl tšá' bījīhashkhá* (*bījīhākhâ'*, *bījīhādeshkhál*), I put the mush into the basket; *tqādidfn biyīstšě* (*bīyīltšě'*, *bīdēstšä'*), I put pollen on the mush and eat; *tqādidfn bīdziltšě'* (*bīdzīltšě'*, *bīzdoltšä'*), pollen mush is eaten, indicating that the ceremony will take place; (*tšá' biyí*) *tqādidfn alnāosnīl*, pollen crossed in the basket; *alnāoshnīl* (*alnaisēnīl*, *alná'ideshnīl*), I cross it, put it across each other.

WICKERWORK

In addition to the basket just described, the water bottle and carrying basket are the only other objects of wickerwork made by the Navaho.

tqóshjē is probably a contraction of *tqō*, water, and *yishjě*, it is closed with gum, from the fact that the wicker bottle or jar is covered with a layer of gum or pitch. These bottles are made of, or sewed with sumac, willow, or other pliable twigs, in the shape of a large vase with a rounded bottom, a globular body, and a long, narrow neck with a flaring rim. A small loop of plaited horsehair is woven into the jar at either side. An awl is the only instrument used, and no particular care is taken to weave very closely, as the jar is rendered water-tight by a covering of pine or piñon gum over the whole inner and outer surface. The gum is heated and poured into the jar, and by inclining and turning is brought



in contact with the whole inner surface, after which the surplus pitch is poured off. A heated pebble is then thrown inside and vigorously shaken, which is said to remove any hardened lumps, and gives the interior a smooth surface. The exterior, too, is now covered with gum, which in addition is daubed with red clay to obtain a reddish hue. Any unevenness is then removed from the surface by pressing a heated pebble over it.

These jars have no lid, but a bunch of grass or sage bark is stuffed into the neck of the jar to prevent the water from splashing out. A cord or rope attached to the loops on the sides of the jar is slipped over the shoulders, or across the forehead, with the jar resting on the small of the back, so that it can be conveniently carried in this manner for a considerable distance. Their capacity is from one to two gallons, though the larger sizes have a greater capacity. They are not plentiful, and are being displaced more and more by the modern pail and bucket.

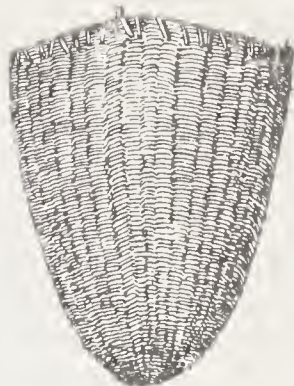
In earlier days a waterbag was also used. This consisted of a piece of buckskin stretched over a hoop to form a bottom, with the ends of the buckskin brought upward and secured to a very small hoop for an orifice. It was called *tqó äzis*, waterbag, or *tqó äbîd*, water-paunch, as later the paunch of a cow or sheep was employed instead of buckskin. The modern bottle is called *tqózis*.



The carrying basket is even less frequently seen than the water jar. *tsfzis* (*tsî*, hair, and *zis*, or *äzis*, a bag or pouch, from the mode of carrying it over the hair of the forehead) is used at present for gathering the *hashkân*, or yucca fruit, for syrup. The baskets are plaited of willow twigs much after the style of our own baskets, but have neither handle nor finished rim. Instead, a cord is fastened to two of the staves or bows, and the basket is carried exactly like the water bottle, but the cord is preferably slipped over the forehead or scalp. At times they

are strapped as a pack to either horse or burro, one basket dangling from either side.

A basket of the same type is sometimes made on the field for conveying the yucca fruit. It consists of two staves or bows made of oak twigs, crossed in the center and brought upward, where they are attached to a hoop. This rude framework, in turn, is covered with goat or sheepskin, which is sewed to the hoop, while a cord attached to two of the staves completes the temporary equipment of the basket.



WORDS

tqóshjē, wicker bottle, water jar.

kī, sumac, etc., see Basketry; kaī, willow.

tqóshjē ashlé, I make a water jar, or tqóshjē náshkhād (nasél-khād, ndeshkhál), I make, sew a water jar.

tságai be tqóshjē náshkhād, I sew the water jar with a bone awl.
jē dishqí' (díłqī, dídesqí'), I melt pitch or gum.

jē dēlqígo, melted gum.

tqóshjē bī'ísíd (bī'ízíd, bīdésíł), I pour (gum) in wicker bottle.

tqóshjē tsě' áwózi bīnānsdzíd (bīnanéłdzíd, bī'ndínesdzíl), I shake a pebble in the wicker bottle.

tqóshjē deilkóligi, the grooves or crevices of the jar.

tqóshjē yishjě (shějē, deshjá), I glue or cement the wicker jar. This expression is used for covering the exterior (bakhádæ) with pitch.

tqóshjē yishchí (shéchī, deshchí), I color the water jar red. Red clay (chī) is mixed with water and spread over the layer of pitch.

dádadeshjá', it is water-tight, it is cemented, from dádeshjá' (dádehjá', dá'didoljá'), it is glued, soldered with gum.

bitqáshjá', the loops, or more exactly, ħi bitsé yishbízhgo bi-tqáshjá', the loop of braided horsetail hair on either side.

bidági, the rim of the jar.

tqó qadishbîn (qadêlbîn, qădîdeshbîl), or tqo âshlê (âshla, adeshlîl), I fill it with water, I get some water.

tl'ô', grass; tsă' bizhî, bark of sagebrush; ânădinîjöl, or âdădinîjöl, a bunch of grass (etc.) for a lid, both words from ânădinshjöl (ânădînljöl, anădîdeshjöl), and âdadinshjöl (adădînljöl, adădîdeshjöl), I close it with a bunch (of hay).

tqôshjê nălji.l, the water jar is carried on the back.

tqôshjê nashjîd (nashêljîd, ndêshjîl), or tqôshjê yishjîl (nîljîd, deshjîl), I pack or carry the water jar on my back. This is also definitely expressed as follows: shitqâ be năshjîd, or sitsî be năshjîd, I pack it with my forehead; sowhôs be năshjîd, or yishjîl, I pack it on my shoulders; tqôshjê bitl'öl, the water jar cord.

tsîzîs, the carrying basket; hashkân benălji.d, yucca fruit is carried with it; baghântîgo ba'ă'tî'go benălji.d, it is carried by a line (string) passed through an opening and around (the staves or bows).

tsîzîs bitl'öl, the cord of the basket; tlîzi khăgi tsîzîs, goat-pelt basket; debê khăgi tsîzîs, sheep-pelt basket.

năsbâs, a hoop; bidă gûnă năskhăd, sewed in the rim (the hoop of the pelt baskets), otherwise the basket is not said to have bidági, a rim.

hî (tqêli, burro) tsîzîs bădasênîl, basket on either side of a horse, baskets used as a pack. Other expressions for carrying or packing are the same as for the water jar.

hî bitsê yisdîz (sêdîz, desdis), I twist horsehair (for loops).

tsîzîs yîshtl'ô (sêtl'ô', deshtl'öl), I weave, make a carrying basket.

tsîzîs ashlê, I make a carrying basket (of sheep- or goat-pelt).

tsîzîs bânas'ăgi, the (four) staves of the carrying basket.

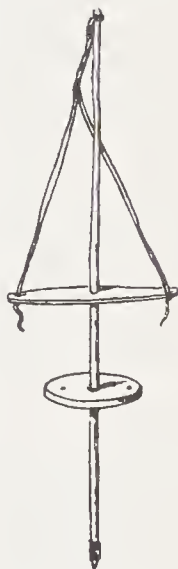
tsîzîs bidă nas'ăhigi, the staves extending over its rim.

tsîzîs bitl'ăhi, the bottom (crossed staves) of carrying basket.

BEADWORK

Beads for necklaces are frequently purchased from the Pueblo Indians, notably the Zuñi, the value of a strand depending largely

upon the consistency and age of the shell. Beads of hard stone, such as turquoise, red stone, olivella shell, etc., are added to these strands of white shell according to individual taste. These, and beads made of conch, or tortoise shell, purchased from the traders, are perforated with a kind of bow-drill consisting of a slender drill-stick of hard wood, and a crosspiece of soft wood, to which a string is attached at both ends and passed with a single twist through a hole in the upper end of the drill-stick. The crosspiece is provided with a hole in the center large enough to receive the drill-stick and allow of a free movement up and down, while the string is passed through two small holes at each end of it. A small stone disk is fitted near the lower end of the drill-stick to steady its motion, and the point, usually secured with sinew, generally consists of a strong wire nail. A few twists between the fingers entwines the string about the drill-stick, which is then set over the stone, or small shell disk, and made to spin by working the crosspiece up and down. In this manner the string is twisted and untwisted until the perforation is made.



Comparatively few spend their time and patience in making beads, as shell and coral beads are easily purchased or exchanged. The bow-drill is still in use for perforating hard stone, especially turquoise. These are polished and smoothened by rubbing on sandstone before perforating them.

yō bebagháda'nīli, bead perforator, bow-drill; bitsín, the drill-stick; bitl'ól, the string; bâ'nāsetqánigi, the crosspiece.

yō bēbaghá'nshnīl (baghánnīl, baghādeshnīl), I perforate beads.
jāt'l'ól, turquoise ear pendant (hajét'l'ól); jaghána'áhi, (round), silver earring or pendant; ja baghāhodzâ, pierced ear.

yō lichí, coral beads; yō lagaf, white (shell) beads.

bizé dejē, necklace of coral bead strands; bizé náztī', any necklace of coral or silver; dałai ntí', a single strand of beads.

LEATHER AND RAWHIDE WORK.

Formerly the hide of deer, antelope, elk, the bighorn, and other animals, were tanned with studious care, and used in the manufacture of the costume, of pouches, shoes, and similar articles. Yet, as the early Navaho despised and shunned labor, and preferred to barter with the neighboring Utes for well tanned hides, so, also, the present generation feels no hesitancy in abandoning laborious and tedious native industries in favor of a serviceable and ready-made article, which accounts for the comparatively meager product in leather and rawhide work. Some of these are mentioned and described in the following.

TANNING

Tanning is done in the following manner. The hide is allowed to soak in water, without any changes, for about a week or so, when it is pinned slantingly from a post to the ground, and the hair and remnants of flesh are scraped off with a scraping stick. It is now soaked again, after which it is secured to a beam or tree and twisted by means of a stick. After remaining in this twisted condition for a day or so it is untwisted and again soaked and retwisted. This is repeated for several days, after which it is spread out and covered with sand to make it pliable and moist. Meanwhile the smoke-hole and entrance or doorway of the hogan have been covered with blankets to exclude the air as much as possible. The hide is now brought in and stretched quickly, after which it is thoroughly rubbed with the brains of sheep and allowed to dry. If robes are desirable, the skin is dressed in exactly the same manner with the exception, of course, that only the surplus flesh is removed. Deer, elk, antelope, goat and calf-skins are treated in this manner, while goat, cow, sheep and horsehides are merely hung up to dry or pinned down and covered with dirt and dried.

The ceremonial skin is also treated or dressed in this manner, the difference being in flaying the animal. After drawing a line

with pollen along the breast and stomach, as also along the arms and legs of the deer, a symbolic incision is made with rock crystal and the hide is then cut with a stone knife.

WORDS REFERRING TO TANNING

bî' nash'á', or nă'ash'á', I skin or flay a deer (nséł'ă', I have skinned it).

bēöldzē, (the tanning stick), scraping stick, which is much the shape of a batten-stick.

bakhāaldzē, scraping frame.

asdzē, I remove the hair.

bedāhandītqāsi, the twisting stick.

dāhadītqās (dahadīstqās), I twisted it up.

lēdistšs, I put it into the ground.

atsīghā, sheep brains.

ēēshnī, I rub with brains.

assē, I tan or dress a skin.

bî' bakhāgi yissē, I dress a deerskin.

ākhāgi, an undressed hide.

yīldzā, an untanned hide with the hair removed.

abāni, a dressed hide.

īgāēl, a dressed elkskin.

asgā, a dried skin.

bî' bakhāgi, a deer robe.

hī, bēgashi, debē and tīzi bakhāgi, horse, cow, sheep and goat-pelts.

tīzi bisgā, etc., a dried goatskin.

ilzē, a smooth pelt, which has been freed of wrinkles.

ayān bakhāgi, buffalo hide.

chīdi, a buffalo robe.

DYEING OF LEATHER

The uppers for the moccasins are dyed with native colors in black, red and a light yellow. The preparation of these dyes is in substance identical with that described for the wool, though they are not applied in the same manner, and no attempt is made at substituting analine colors.

BLACK DYE.—The ingredients for the black dye are sumac, pitch and ochre. The twigs of sumac (kī) are boiled in an earthen pot, after which they are removed and the solution retained. The pitch and ochre are then slightly roasted and slowly added

to the solution, which is placed over the fire again and continuously stirred while the gum-ochre is being added, and until it has completely dissolved with the sumac solution. The concoction is then allowed to cool off, after which it is applied to the surface of the leather with a tuft of wool for a brush.

RED DYE.—The root of juniper and mountain mahogany serves as an ingredient for the red dye. This is well crushed and boiled, after which the solution is poured off and a mixture of pulverized alder bark and cedar ashes added to it, when it is replaced over the fire and allowed to boil again. It is then applied warm to one or both sides of the leather, which at times also is immersed in the solution.

YELLOW OR ORANGE DYE.—To obtain the yellow dye the flowers of the golden rod (*kĩltsoi*) are boiled, to which a quantity of rock alum (*tsě' dokózhí*), previously roasted in ashes, is added. This, with a pinch of paper clay (*nĩ'hadlád*), is again boiled, and when thoroughly dissolved and cooled off is applied with the wool brush, producing a light orange color.

WORDS

kĩ shibézhgo, the sumac is boiled; *je' dǐlǐdgo yit'ēsgo*, the pitch is burnt and roasted; *ńda' tsékhô' aido yit'ís, sít'ēgo*, and ochre, this, too, is roasted and boiled; *ákhô lizhín ilé'*, in this manner black (dye) is made.

dzitsíd, it is crushed (from *yistsíd*, I pound).

dizaf ilé', it is crumbled, pulverized.

kĩ bitqō, or *bitqōǎ*, the solution of sumac.

áltso ndo'ól (*ndí'ēl, ndído'ól*), it is entirely dissolved.

ndajishí abáni, they dye buckskin black.

kĩsh, alder; *sagángo yikágo*, dried and ground.

tséhesdāzi behétl'ól, the root of mountain mahogany.

yitsédgo t'a bizhán, this is well crushed.

gād dǐlǐd (*leshchí*), burnt cedar (ashes).

bijijí, they put in (from *bīyishjí*, I add granular objects to others).

kiltsoi, bigelovia; tsě' dokózhí, rock alum.

lěshibězh, roasted in coals; nǐ' hadlád, blue clay, paper clay.

nikě' (nezkě', dínokeł), cool, cooled off.

nishkě' (něłkě', dínesheł). I cool it off, allow it to cool.

abáni (or akhál, leather) yishf' (yishf, yideshft), I dye buckskin black; abáni yishchí (yılchí, yiděshchí), I dye it red; abáni yistsó (yıltsúı, yiděstso), I dye it yellow or orange.

yılzhf, the black dye; yılchí, the red dye; yıltsúı, the yellow dye; yılzhf bėshtlo (besétlě', bideshtlō), I spread the black, etc., color over it, or yılzhf bídínshqışh (bídínşyızh. bídíneshqışh), I rub black, etc., on it.

SHOEMAKING *

The art of shoe- or moccasin-making is a very simple one and practically confined to the men, most of whom are able to make, or at least to repair, the moccasin. The tools used are few in number, only an awl and a knife being necessary, and these are very often combined in a two-bladed pocketknife, whose smallest blade has been rubbed down to form the awl. The primitive bone-awl, made of deer-bone, and known as tságai, the white awl, and other bone awls (tsǐntsá) are rapidly disappearing, being displaced by the needle (tsă tsósi), which is driven into a wooden handle, or fastened with sinew or cord between two sticks of a convenient size. As a practical instrument the stone knife, too, has long since disappeared, and is now confined exclusively to ceremonial purposes.

In the manufacture of a moccasin three materials are used, a rawhide for the sole, buckskin for the uppers, and the loin-sinew of sheep, goat or deer, though the latter kind is rapidly disappearing. The primitive footgear consisted of a sole made of yucca, with uppers of badger or wildcat skin, which later was entirely displaced by buckskin. The thick neck of both deer and badger were used for the sole, which at present is almost

*For much of the data contained in this article we are indebted to some unpublished MS. of the late A M Stephen.

exclusively of rawhide. A piece of rawhide of a suitable size having been procured it is at first pounded with a stone until it becomes somewhat flexible, when the hair is scraped off, with no particular care of removing it entirely. It is then buried in moist ground or sand for two or three days to render it soft and pliable. When taken from the ground the Navaho sets his or her foot upon it to obtain the size of the sole, which is cut out about half an inch larger than the size of the foot, and leaving a margin of an inch extending at the toe. The cut-out soles are then held to the fire and thoroughly rubbed with tallow or fat (on the hair side).

The shoemaker now fits the sole to the exact size of the foot, bringing the edges well over the sides of the foot, and the tip well over the big toe. By kneading and pressing the edges with the fingers and the teeth the exact impression of the foot is made on the sole. The uppers usually consist of but one piece of buckskin, which method is found more practical than securing two pieces with thongs as is sometimes done. However, the uppers are fitted and cut out to enclose the foot snugly, yet without compression, leaving the ends sufficiently long to wrap one end well around the ankle, overlapping it with the other, in which fashion it is secured with silver buttons or thongs on the outer side of the foot.

The measures taken, the shoe is ready for sewing. A few fibers of sinew are then torn from a supply usually kept on hand, passed through the lips to wet them, and rolled on the knee to a stout thread. Two of these, each sufficiently long for one shoe, are rolled and tied together. It is often more convenient, too, to fasten the uppers and sole at the top and sides by means of a few temporary stitches. This done, a hole is bored through the sole at the tip, and both threads are passed through to the knot. With one of the threads the left, with the other the right, side is sewn. There are, however, various styles of stitches used.

The most simple stitch is that known as *bikfidesdizi*, it is wound around, which in process is the same as winding a thread around

a stick, hence the name. The outer rim of the sole edge is completely hidden by the upper, which fits snugly over it. Holes are punctured close together and simultaneously through both the upper and the sole, while the thread is always passed through from the side of the sole. The stitch is therefor clearly visible. It is used in sewing the heel, even when another style of stitch is used for the forepart of the shoe, and is ordinarily employed for repair work. The moccasin sewed in this style is called (khě) bikídesdizi, or khě bikídesdizgo náskhadi, shoe sewed in winding.

Another stitch, usually made with two threads, very much resembles the stitch used by saddlers in sewing leather. Both the sole and uppers are punctured, and the threads passed through and fastened from either side. Accordingly, this is alnáháotsi, stitched through the center, or cross-stitched.

A third style of shoe is made by passing the thread through the outside rim of the sole, and making a short longitudinal stitch on the surface of the upper near its edge, drawing the sole to the upper. Hence, bił yaadló náskhadi, a seam which draws it together.

An invisible and fancier stitch is obtained by passing the thread through the inner rim of the sole, and making a short stitch on the surface of the upper, and drawing both together. The seam is thus hidden in the joint of the upper and sole, allowing the surface of the rim of the sole to extend slightly above the seam edge. This seam, however, is discontinued at the instep and another employed in its stead, so that the instep and ankle present a flat, close edge. This style of shoe is known as khě bitqát'ă' itsi, the shoe seamed in the groove.

Similar to this is another style called khě bakáyí' itsi, the shoe with the inside surface seam, which is obtained by longitudinal stitches made on the surface of the upper and the inner surface of the sole, which brings both flush together and makes the seam invisible. The edge of the sole, too, extends over the seam, though from the manner of sewing, the edge is not drawn toward the seam as in the preceding stitch.

The shoe is always sewed and repaired after moistening the leather. Accordingly, the torn moccasin is buried in sand for a night or so, and the process repeated if the leather prove insufficiently pliable.

Silver buttons, fastened with thongs, are now generally used instead of mere thongs for securing the shoe at the ankle. At home the moccasin is often discarded, as also in wet weather, while in winter it is protected with wraps made of gunnysacks, or the pelt of a kid, lamb, sheep or goat, with the woolly side turned in. The latter are known as *khě chǔgi*, shoes or overshoes which make the noise, *chǔg, chǔg*, in treading the snow. (Cf. snowshoes under Snow.)

The ordinary moccasin is used at public dances, as also for the moccasin game (q. v.)

In an article entitled, "The Navaho Shoemaker" (Proceedings of the United States National Museum, 1888, pages 131 et seq.), the late A M Stephen exhibits a so-called Navaho dance shoe. This figure, however, represents a type of shoe now no longer in use, but which, previous to the introduction of buckskin, was quite generally used in war and raids, and was made of yucca strands or other pliable grass. The yucca was treated as in ordinary yucca fabrics, that is, it was boiled and ground to a pulp to extract its pith. This was then woven (*yistl'ó*) and braided (*bitqát'ă yishbǐzh*), both for the uppers and the sole, unless badger or other hides could be had for the latter. In this case the upper and the sole were sewed with field rat or badger sinew, otherwise yucca strands were employed in sewing. When convenient, porcupine quills were inserted into the yucca seam, weave and selvedge for decoration. Two lobes, made of hide or twisted yucca, were furnished on the sides of the uppers to facilitate slipping the shoe over the foot. At the heel a spur of twisted yucca was secured for the purpose of effacing one's tracks in war, as this odd type of shoe was made for no other purpose than to elude an enemy. Hence, after the introduction of the present moccasin of buckskin, the yucca shoe

(tłökhě) was not altogether discarded, but was frequently made and carried on raids and in war. Some specimens are still extant, but are kept as family relics, like the shield and spear.

The present type of moccasin was originally furnished by the Utes, who were better skilled in tanning and buckskin work, and at one time were not hostile to the Navaho. These early moccasins were frequently decorated with beads and porcupine quills, which later, however, disappeared entirely. Accordingly, then, no specially designed moccasin was prescribed for dancing, as the rites seem to disregard the footgear entirely. Tradition, too, takes no offense at dancers appearing in their every-day moccasin, while on the other hand it is regarded as an unwarrantable innovation that some of the younger dancers set aside a pair of nicely finished buckskin moccasins for no other purpose than to appear at the yēibichai or other public exhibitions.

WORDS.

khě ẽshlě, I make moccasins (shoes).

khěkhăł, the sole, sole leather.

akhăł, a hide; akhăł yishě (yíshē', deshí), I shave, scrape the hair from leather.

khěkhăł lēdishlě (lēdíłă, lēdideshlél), I bury, put the shoe leather in the ground.

khěkhăł yisě (yisá', desél), or Khěkhăł yistsíd (yítsēd, destsíl), I pound shoe leather.

ídishgyesh (ídílgīzh, ídideshgīsh), I cut out (sole); khěkhăł ídílgīzh, a sole cut out; adídishgyesh (adídishgīzh, ádíđédesh-gīsh), I cut out (leather) for myself.

khěłchí, or khěłchí (khě) bñīđă, the uppers of the moccasin.

khěłchí ídishgyesh, I cut out the uppers.

tságai, white (deer-bone) awl; tsñtsá, bone awl; bestsá, metal awl; besh bēnaakhă, metal needles, and tsñ bēnaakhă, wooden needles (made of rosebush), were used to sew selvedge and tassels on saddle blankets.

atsíd, sinew (usually deer); ditsíd, tough, strong.

tłízi bitsíd, goat sinew; atśíd ntsqás (go yisdíz), heavy (twisted) sinew, which is used in the stitch called bitqátă'ítsi, the groove stitch; tsă tsósi, the needle, also the awl made of a needle or darning needle; tsă tsósi bēnăłkhăd, sewed with a needle, a sewing needle.

nă'ăshkhăd (nasělkhăd, nădeshkhăł), I sew.

baghănstse (baghăntsi, baghădestsi), I puncture, perforate.

baghăla'astsi (baghălasetsi, baghădadesti), I puncture, make holes.

băghănshtě (baghănt'i, baghădesht'i), I put (sinew) through the hole.

baghăla'asht'i (baghădaselt'i, baghădadeshst'i), I put (sinew) through; distsód (deltśód, destśól), I stretch or pull (the sinew).

khě bikídesdizi, or khě bikídesdizgo năskhăd, shoe with winding seam; ałnăháotsi, or khě ałnăhaotsígo năskhădi, shoe with the cross-stitch seam; biłyaădló năskhădi, or khěbił yaădlói, which is drawn to the sole; (khě) bitqátă'ítsi, hidden seam shoe; (khě) bakăy'ítsi, inside surface seam shoe.

bikhétqăł, the heel of the moccasin; bikhénî, the instep of the moccasin; hakhélăd, hakhé ládi (shikhé ládi, my), the tip of the moccasin (inside); hakhé bilátqăi, the tip of the moccasin (outside).

khě bikhédă, the heel leather, or wrap around the ankle.

baghăgîzh, buttonhole; yô nłchîni, button, silver button.

khě dăhashchă' (dahăłchă', dahidëshchă'), I tie the moccasin (with thong); yô nłchîn bédahashchă' (ntăé), I button it.

khě yîłzhî, blackened (upper) shoe; khě yîłchî, red (upper) shoe; khě yîłtsói, yellow (upper) shoe; khétśîni, (men's) low moccasins; khě ntsăi, (women's) high moccasins; awé, or ałchîn bikhé, baby or children's moccasins; khě bikídesdizi, footwraps of women (leggings); khéndotsösi, shoes (American); khéndotsösi bidăgi nnăzi, or khéndotsösi dégo nnăzigi, (which are long above), boots (American). Shoes and boots are purchased.

khě shíghă (ntăé), the shoe fits me well, or tă shíghă; khě shé nłtso, the shoe fits my foot, or shíněl'ă' (ntăé), my size, or tă shé nłtso, tă shíněl'ă', just my size; do-shíghăda, it does not fit, and

so on of the other two words; khě shínestqí (nt'áé), the shoe is too tight; khě dasho'ál (nt'áé), the shoe is much too small (too tight a fit).

shikhé bagházhāsh (baghānzāzh, baghādozhāsh), or baghát'ōd (baghānt'ōd, baghādot'ōl), my shoes are full of holes.

shikhé nēhēzhāsh (nēhæzhāzh, níhidozhāsh), or nēhēt'ōd (nehez-t'ōd, néhidot'ōl), my shoes are torn, worn out.

shikhé nāōdlād (nāōsdlād, na'idodlāl), or nāōzhāsh (nāōzhāzh, neidozhāsh), or nāōt'ōd (nāōzt'ōd, néidot'ōl), my shoes (its seams) are torn.

bidāndinsh'ā' (bidāndinā'ā', bidāndīdesh'ál), or bīdadinsh'ā' (bīdadinā'ā', bīdadīdesh'ál), I close, repair the shoe.

khě ashtelné (asht'elya, ashtédolnīl), or khě álya (pr. alné', adolnīl), the shoe is finished, done.

khě análné' (anályā, ándolnīl), the shoe is remade, repaired.

khě shijé (khéshijē), the moccasin game (q. v.)

khěchūgi, overshoes or wraps; tsikhé, or yāsgokhé, wooden shoe, or snowshoe; t'ō'khé, grass shoe, the yucca shoe.

LEATHER WORK

In addition to the manufacture of saddles and shoemaking, a variety of articles are made of leather and rawhide.

The Navaho make leather pouches from five to six inches square, with a flapping lid extending about two inches over the pouch. These serve as receptacles for tobacco, matches, pocket-knife, money, and other small articles, as in the earlier days they contained the steel and flint, corn leaves and tobacco, pollen, and the dice used in gambling. The pouch is occasionally worn by some of the older members of the tribe, though the younger generation discard them, preferring modern clothes, which are usually well supplied with pockets. It is carried on the left hip, and is attached to a strap passing over the right shoulder. Both pouch and strap are often decorated, the latter especially, with a profusion of small silver buttons.

The belt, consisting of an ordinary leather strap, is usually hidden under massive silver disks, and buckled in front with a silver or other buckle. The belt is worn by men, women and children, and is adorned accordingly, with from seven to eight of these silver disks. The cartridge belt, however, with profusely decorated holster, containing a pearl-handled six-shooter, appeals very favorably to many of the younger Indians, so that the use of the silver belt is confined almost exclusively to women and maidens. They are worn by the women on journeys and festive occasions, and in addition to the sash.

The wrist-guard consists of a piece of leather about three inches wide, which is laced with buckskin thongs on the inner side of, and tightly fitting, the wrist of the left hand. A heavy silver plate, often of exquisite workmanship, and with beautiful turquoise setting, decorates the guard on the outer side, as the wrist-guard largely has no other than an ornamental purpose.

This is equally true of the headstalls which occasionally are used in riding. They are made of an ordinary leather strap, and heavily ornamented with oblong silver plates, which are clasped to the cheek straps and the head-band. In addition, two conchas of silver are fastened with thongs at each end of the head-band, while two silver pendants dangle at the sides of the headstall. Silver bridles are much in favor with the women who use them on public occasions. More frequently they are placed in pawn with the storekeeper, as ready-made headstalls may be purchased at a small cost.

WORDS

dă' nayízi, (which shake or move in walking), leather pouch.

dă' nayízi aqānbínshgyēsh (aqānbínlgīzh, aqānbīdeshgīsh), I cut out (leather for) the pouch.

dă' nayízi nāshkhād (nasēlkhād, ūdeshkhāl), I sew the pouch.

dă' nayízi ishlē (íshla, adeshlīl), I make a leather pouch.

(dă' nayízi) bikēdīltsōsigi, the flap.

dă' nayízi bīldasā'ānigi, the pouch button.

dă' nayízi bitlól, the pouch strap.

dă' nayízi bitlól báhasnîl, or yō nłchín āghāgháhazt'fīgi, the silver buttons decorating the shoulder strap.

sīs, the belt, also the silver disks.

beēldō' bizís, a holster, cartridge belt, gun case.

beēlchídídlo, a buckle.

sīs dolyéli, or holyéli, a buckled (belt) strap.

yō nłchín nōjīhigi, ornamental silver buttons of a smaller size, as seen on moccasins, holsters, pouches, and so on.

sīs asht'ē'nbínshgyésh (asht'ē'nbínlgīzh, asht'ē'nbídeshgīsh), I cut a (long) strip for the belt.

sīs qashgyésh (qālgīzh, qādeshgīsh), I cut the belt out (of a strip of leather).

sīs āshlé, I make a belt; sīs nāshkhād, I sew the belt.

beēlchídídlo bídahish'á (bídasā'á', bídadesh'ál), or bādahish'á (bādasā'á', bādadesh'ál), I adjust the buckle, put it on the belt.

beēlchídídlo bídishkhād (bídlīkhād, -bídídeskhāl), I sew the buckle on.

akhászis (akhásíszās, akhādeszīs), I girth myself.

sízís ke'ish'ág (ke'í'á', kídesh'ál), I ungirth myself.

nahidishlé (nahidíflá', nahidídeshlél), I buckle, fasten something.

nāhizhdídle (nāhidílyé), or anāhizhdídle, it is buckled, consequently sīs dolyéli would mean the belt which buckles.

kēt'ō', (which breaks the shot), a wrist-guard; kēt'ō' qashgyésh, I cut a wrist-guard; kēt'ō' āshlé, I make a wrist-guard.

kēt'ō' bitlól, the thongs for the wrist-guard.

yō nłchín kēt'ō', the silver plate of the wrist-guard.

PLATTING

Horse hobbles are made of rawhide strips about two or three inches wide, and about two feet and a half long. A button knot is braided of the spliced rawhide on one end, while a slit is cut into the other end to receive the button. When still green, or moistened, six or seven twists are made with the rawhide, leaving a loop at either end to receive the foot of the horse. It is

then placed in the sun to dry, after which it will retain its shape unless too frequently exposed to rain. When desired, the hobble is untwisted, the center part is passed around the foot above the hoof, the twist refolded, and the two ends are buttoned around the other foot. This kind of hobble is very durable and may be conveniently strapped to the saddle.

Though it is now usually preferred to purchase quirts, or riding whips, and ropes at the various stores, many Navaho are skilled in plaiting these articles, and produce a very neat and durable fabric. A bone or hard wood awl is the only instrument used in platting. Formerly the quirt was made of a strip of rawhide, the center of which was wound around a stick, while the spliced ends, or the four strands, were platted to form a convenient rod. At the end of this, or near it, a hole was provided for the purpose of slipping a strip of rawhide through it, so that the quirt might be carried on the wrist. The platting done the quirt was dried in the sun, after which the stick was removed and a lash fastened in the loop, when the quirt was ready for use. At present black or tanned leather strips are used in plaiting, the larger and better made quirts requiring from eight to ten and sixteen strands. The interior is made up of a piece of twisted and sun-dried rawhide which, in addition, is often wound with cord or cloth to increase its size. Around this the leather strips are platted so as to conceal their ends and present a neat and smooth surface. The grip usually terminates in a plaited knot with a sling for carrying the quirt.

Occasionally, horsehair is substituted for leather in plaiting, and a very attractive quirt of alternating white, red and black horsehair is made for the market.

They also plait lariats, or horse ropes, of buckskin, using from three to eleven strands. Owing to the scarcity of buckskin, however, goatskin is often substituted. They are very durable, and wear well for ordinary purposes, though for lassoing the ordinary hemp rope is preferred as less expensive. Lariats are also plaited of horsehair, wool, and recently also of rawhide.

WORDS.

h̄i behétl̄ōl, the hobble; h̄i behétl̄ōl ishl̄é, I make a hobble.

h̄i behétl̄ōl aqānbínshgyesh (aqānbínlgīzh, aqānbídeshgīsh), I cut the leather for a hobble.

h̄i behétl̄ōl yishjāsh (nt'æ), I make a knot on the hobble.

h̄i behetsf' beēshtl̄ó (besétl̄ô', bedeshtl̄ól), I hobble a horse.

h̄i behétl̄ōl bił danāt'āhi, the knot of the hobble.

beētsqīs, the whip, or quirt.

beētsqīs yishbīzh (shēbīzh, deshbísh), I make or plait a quirt.

yishbīzh is used for three or more strands, thus: tqágo yishbīzh, dīgo, ashdlágo, hastqágo yishbīzh, etc., a plait of three, four, five, six, etc., strands.

n̄iyīzgo yishbīzh, a round plait, it is plaited round.

bídazneskágo yishbīzh, braided or plaited in a square, quadrangular plait.

daKá; a square.

alkésgīz, twisted; alkísgīz (alkísélgīs, alkídesgīs), I twist a (single) strand; alkéstqās, twisted; alkístqās (alkíséltqās, alkídes-tqās), I twist (two strands).

aqínłkhádāsīd, chain plait, used in making quadrangular quirts.

aqínłkhādasīd (aqínłkhādasēsīd, aqínłkhādadesīl), I draw both on it, because the ends are exchanged through the opening and drawn together like a saddler's stitch. The chain plait is meant.

yishjāsh (nt'æ), I make a knot.

yishāsh (shēzhāsh, déshāsh), I make a knot, plait a knot.

akfji yishjāsh, it is knotted (the plait).

bikídesdīzgo yishjāshi, a knot, which in addition is wrapped or wound with leather.

nāōsh'tqád (naiséltqā', na'ideshtqál), I unravel, untie (a knot).

nāōsh'ād (naisá'ā', na'idesh'ál), I untwist.

abántl̄ōl, a buckskin, or goatskin rope.

h̄i bitsétl̄ōl, a horsehair lariat (horsetail hair).

aghāsīs tl̄ōl, a woolen rope.

aghāsīs tl̄ōl yishbīzh, I braid a woolen rope.

abáni yishbízh, I plait a buckskin rope; or, describing the process: tlízi khági yildzāgo do yīlzāgo ádo nehestāzdo, ndída yishbízh. after removing the hair from the goatskin, tanning and cutting it in strips, it is plaited.

akhál, rawhide; akhál yīlzlí, blackened rawhide, leather.

IMPLEMENTS OF WAR AND THE CHASE.



The spear consisted of a stout shaft, about seven to eight feet in length, to which a point of flint, and later of iron, was fastened and decorated with a tuft of eagle feathers.

tsīdītqān (tsīdītqā), the spear; tsīdītqān bitsín, the spear shaft. tsīdītqā yistsíd (yítsēd, destsíl), I pound the spear point.

tsīdītqā yishkāsh (yíkásh, deshkāsh), or tsīdītqā babá yishkāsh, I whet the edges of the spear.

tsīdītqā (babâ) yishchísh (yíchísh, deshchísh), I rasp or roughen its edges with a stone or file.

tsīdītqā qāhashkásh (qahákāsh, qáhideshkāsh), I grind or whet its tip; tsīdītqā qāhashchísh (qaháchísh, qáhideshchísh), I rasp the tip of the spear.

tsīdītqā ashlé (íshla, adeshlíl), I make the spear (handle).

kīs tsōs, slender alder (for the handle).

átsē, the tail (made of atsá bitsé, eagle tail feathers), tuft of feathers decorating the spear.

tsīdītqā be idishísh (nt'áe), I prick (stick) with a spear.

tsīdītqā be yistsí' (nt'áe), I wound slightly (with spear).

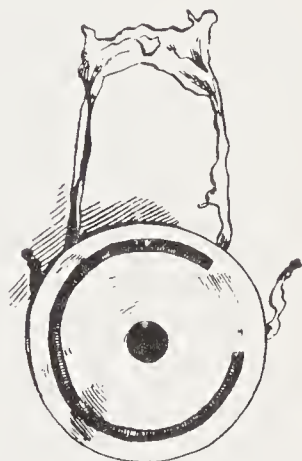
tsīdītqā ná'ishgyēd (na'ílggyēd, naadeshgól), I pierce with spear.

tsīdītqā naghánshgyēd (naghánlggyēd, naghádeshgól), I run you through (pierce) with a spear; tsīdītqā qá'ishgyēd (qa'ílggyēd, qáádeshgól), I pierce him with the spear; tsīdītqā nínástsí (nín-sétsí, níndestsí), I ram (thrust) you with the spear. The thrust was made downward and rarely from the side.

tsīdītqā nāhanáshtqí (nāhanátqá', nāhadeshtqíl), I extract spear.

tsīdītqá nahanásdzís (nahanádzís, nahadesdzís), I jerk it out.
 dīshīsh (dēshīzh, dīdēshīsh), I stick, thrust at.
 déilzhīzh, spear wounds, or scars.

Some maintain that the shield was elliptical in shape, others know only the round shield shown in the accompanying cut, which was made of horsehide, and later of rawhide. This was burnt slightly, placed over an anthill and covered with a heavy layer of dirt to give it the desired shape, when it was placed in the sun to dry. The entire outer rim of the shield was decorated with eagle feathers, to preserve which many shields were provided with a crease in the center, so that they might quickly be opened and closed by stepping on them. In addition, the outer surface of the shield was richly emblazoned with figures relating to war, such as figures of the sun, half sun, rainbow, crescent, a bear's foot, and the Slayer of Enemies.



In action the shield served to guard against attacks from either side, for which purpose it was carried through a buckskin sling on the left arm, while again it could easily be brought to the front or rear by means of the buckskin band which was attached to the shield and passed over the right shoulder. With the introduction of modern firearms, however, few were found dextrous enough to constantly hold the shield at such angles at which a bullet should glance from it, so that both shield and spear became worthless. Shields may still be found among the family relics.

nāgě (nagyě). (which is carried on the back), the shield.

atsá bitsé, eagle tail feathers.

nāgě ishlě, I make a shield; tsīn bił daashkhāl, I tack it down with wooden pegs.

The bow, always carried in war, was made of oak, tsélkháni (a very hard wood), cedar, or sumac, and is now also made of black greasewood. The lower or inner side of the bow is flattened, while the other side is made smooth and slightly rounded at the edges. The stick is then heated over a fire, after which the foot is firmly planted on the center, and both ends of the stick are turned inwardly. Both ends of the stick are in turn pressed against the knee, so that when finished the stick has a slightly serpentine appearance. The extreme ends and the center, where the foot has been planted, are now wound with sinew of bighorn or deer (now also of goat, cow or other sinew) to the length of about three or four inches, to strengthen these points. Finally the whole is covered with pitch.

The bowstring of twisted bighorn or deer (goat, cow or other) sinew is securely wrapped about the end of the bow, while the loop at the opposite end of the bowstring may be easily slipped over the notch provided on the bow. When not in use the string is unslipped to release the tension. The bow is not decorated.

The shaft of the arrow is made of one or other species of hard wood like wild currant, black greasewood, *Findlera rupicola*, etc. Sticks of these are well cleaned of their bark, smoothly polished and straightened, which was done by pressing them between the teeth, or running them through narrowly grooved stones, or a punctured horn of the bighorn. A small notch to fit the bowstring is then made at one end of the shaft and a double zigzag line, with two intervening straight ones, representing zigzag and sheet lightning, are marked across its entire length. A triple fletching of eagle, hawk, crow or turkey feathers is then added and secured



with sinew. A narrow colored line of red and blue at the tip of the fletching completes the decoration of the shaft. The



Arrow Plane

arrow-point of chipped white flint (besh ilgaf) or flint (bés'est'ŭgi), and at present a piece of iron rubbed down to a triangular flat point, is set into the spliced end of the shaft

and secured there with sinew.

Bow and arrow are still in use for small game and birds, and also in the game of arrow shooting. In practice, a blunt, pointless arrow is used, and at times a shaft made of reed and decorated in the above described manner may still be seen. Prairie dogs are frequently shot with a barbed arrow made by driving a nail, or piece of strong wire, just below the usual arrow-point. The barb prevents the animal from extricating itself, and facilitates extracting it from its burrow.



Arrow Plane

In dispatching the arrow, the bow is firmly grasped with the left hand, and after adjusting the arrow, is held vertically in front of the archer. With the index finger and thumb of the right hand holding the arrow in position, and resting the shaft on his left hand, the archer draws the string toward himself with the middle finger of the right hand. After sighting along the shaft of the arrow he releases it with a snap in the direction of the object. To protect the wrist against the cutting sting of the bowstring a guard, or small strip of leather, was worn around it. To-day, though it still serves this purpose, it is mostly ornamental, and is often decorated with a heavy silver plate with turquoise setting.

altqín (altqí'), the bow; altqín yistsél (yítsēl, destsíl), I make (chop) a bow; altqín bitqél distsél (dêtsēl, destsíl), I give the bow a front (flat, inner side of bow).

bitqél dishé (dëshē, deshí), I shave (polish) the front.

altqín ishlé, I (now) make the bow.

altqf' habó'ól'ēz, (where the foot has stepped), center of bow.
atsíd yisdíz, I wind the sinew.

altqín tlól, the bowstring; altqín bitqf'a' osht'é' (bitqf'a' isélt'i',
bitqf'a' idesh'ti'), I attach the bowstring.

altqf' bitqf'a' isélt'i', the bowstring stretched.

altqín yishjé' (shéjē, deshjá'), I cover the bow with pitch.

kā', the arrow; kābēsh, the arrow-point.

besh ilgaí, white flint; besh, iron; bes'ěstógi, flint, chipped
stone point, arrow-point; bésdölāghās, serrated arrow-point.

kā' āshlé, I make an arrow.

tsākā' (tsiká'), the arrow-shaft.

tsāká' yishqízh (vfyízh, deshqísh), I break (twigs) for the arrow-
shaft; yishtqf' (yítqi' deshtqf'), I break (twigs) off.

bakhági yishé (yīshē', deshí), I shave bark off.

yisí' (yízi', desí'), I scrape, polish the twig.

askás (íkāz, adeskās), I straighten it.

bakál, the notch.

bakál ē'eshgyésh (ī'īgízh, ideshgísh), I make (cut) the notch.

bikinojí igi, the lines on the shaft.

bikí'nishí' (bikí'nízhí', bikí'dinéshí'), I mark it with lines.

bitáya ádaashlé (adashlá, ádādeshtí), I color it.

ashtá' (aséltá', adeshtál), I add the fletching.

bibézh ádaashlé, I attach the point.

kābēsh bikídesdíz, the point is wound (with sinew).

altqíntlól distsód, I stretch the bowstring.

adishtó' (nt'é), I shoot an arrow.

ajishtó' (adzíltö', azhdesh'tó'), I shoot well, understand, often
shoot arrows.

adzísí' (adzísí' azdesí'), I missed the mark.

nadishtó' (nadísh'tö', nadídeshtó'), I play arrow shooting.

bakásda, an arrow wound (also for spear and gun wounds).

kākēi, one wounded by an arrow.

qákhāl, grazed (by a shot).

lúkākā', a reed arrow.

kā' bečkāshi, arrow-shaft straightener.

Bows and arrows were carried in a quiver made of mountain lion or goatskin, and provided with two pouches to receive the arrows and bow. In time of peace it was girthed around the waist



and hung down the right side, while in war it was strapped to the back, over the right shoulder, so that the archer might conveniently reach back, and also protect himself with the shield

from attacks on the front. The quiver has not entirely disappeared, though most archers prefer to carry a few arrows and the bow in their hand, gathering each arrow after its discharge.

The stone ax was used at close range.

kāyél, the quiver; kāyél āshlé, I make, and kāyél náshkhād, I sew the quiver.

kā'āzīs, the pouch (in the quiver) for arrows.

altqízīs, the pouch for the bow.

kāyél qashgyésh, I cut (the hide) for the quiver. Similarly, kā'āzīs and altqízīs qashgyésh, āshlé, náshkhād, I cut, make and sew the leather for the pouches.

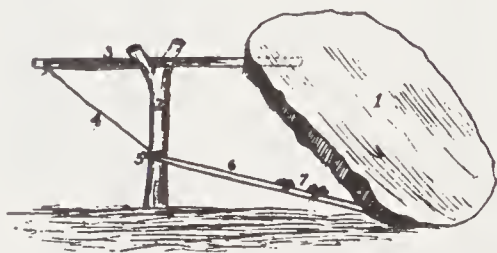
kāyél bakhászīs (bakhásíszās, bakhádeszīs), I girth myself with quiver (hanging down), but kāyél yishgyé (yishgf', yideshgél), I carry the quiver (strapped to my back).

nīl, or tsénīl, stone ax.

GAME TRAPS

The following trap was used in former days for four-footed game.

A forked post (2) is planted into the ground and a strong stick (3) placed in the fork. Against one end of this stick a stone slab (1) is leaned, while a rope is tied to the other end, which is wound several times around the forked post near the base. At the other end of the rope (4) there is a small stick (5) used as the trigger of the trap. Another stick (6) is placed from the base of the stone slab and braced against the small stick at the end of the rope. On this last named stick the bait (7) is attached. So soon as the animal disturbs the stick (6) the latter falls to the ground, releases the trigger (5), and unwinds the stick (3), so that the stone (1) falls and crushes the game.



Traps of this kind were used not only for larger game, but also for rabbits, mountain rats, or any other four-footed animals. At present they are rarely used.

beeljizhi, (that with which one smashes), a game trap.

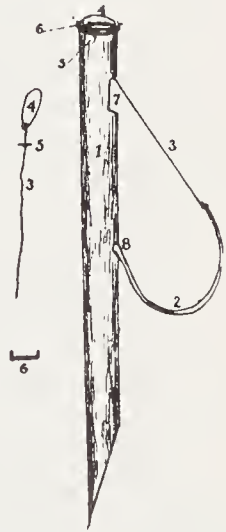
ashjizh (ashéljizh, adeshjish), I smash.

yishjizh (shéljizh, deshjish), I smash, crush it.

gă' yishjizh, I trap (crush) a rabbit.

SNARES FOR BIRDS

The following snare is still used for catching birds. The stalk of a sunflower, about three to four feet long, is procured, the pith well taken out of the upper part, and the rim polished perfectly with a stone. A small hole (7) is cut in the stalk, about three inches below the rim, and another smaller hole (8), sixteen to eighteen inches below the rim. Into the smaller hole a twig of greasewood (2) of the thickness of the little finger is thrust. At the end of this twig is fastened a string made of two horsehairs and twisted (3), with a sliding loop (4) at the end. Just below the loop a very short stick (5) is tied with the horsehair string. Another small stick is cut by splitting a piece of reed (6), fitting it across the top rim of the stalk (1), and turning it up at both ends to keep the loop from falling over or being caught by the rim. All parts in contact with the snare must be polished perfectly smooth.



The stalk is stuck into the ground in or near a cornfield, or other place frequented by birds, the twig of greasewood is bent in a bow and the snare is passed through the upper hole across which the small piece of reed is laid. The very small stick below the snare is placed so that one end rests on the rim of the stalk and the other on the reed, while the snare is arranged about the rim of the stalk within the upturned end of the small piece

of reed. A bird alighting upon the stalk will disturb the arrangement; the small piece of reed, slipping from its place, will release the short stick on the snare; the twig of greasewood, in straightening out after the release, will pull the snare with the bird's foot into the hollow stock.

Usually a number of these traps, sometimes as many as ten or twelve, are set up in a place. Early in the morning or late in the afternoon is considered the best trapping time. Dung burnt at different spots on the place is thought to attract the birds.

tsídi bewúdlêhe (beodlêhe), bird trap, snare.

tsídi wushlê, or yishlê (yflô', yideshlô), I trap (snare) birds.

ndīyfli, sunflower; lī bitsē alkēsdīs, twisted horsehair; lūkā, reed; lõ, snare, loop; duwúzhilbaí, greasewood.

BOOMERANG

The boomerang is made of oak and whittled down to the shape of a battenstick, when it is heated and bent over the knee to give it a slight curve on the edged side. In hunting rabbits it is hurled after the animal, the object being to break its legs.

tsáqāl, the boomerang, or tsáqāl nālkí, sailing boomerang.

tsáqāl ashlé, I make a boomerang.

tsáqāl beējishqāl (beēdzíqāl, béēzhdesqāl), I hurl boomerang.

lēsh bitqázhdishqāl (bitqázdzíqāl, bitqázhdídesqāl), I skip it along the ground.

léjishqāl (lēdzíqāl, lēzhdéshqāl), I strike the ground.

gǎ' naābijishqāl (naābidzíqāl, naābízhdesqāl), or gǎ' údishqāl (ndíqāl, údídesqāl), I strike a rabbit.

gǎ' bitqáqñishqāl (bitqáquvéqāl, bitqáqodiyeshqāl), I strike it between (its legs).

SLINGS

A toy gun is sometimes made by boys and used to shoot birds with stones, nails, small arrows, or bullets. It is made of a

grooved stick in the shape of a gun, with a small bow attached to its muzzle, and a string fastened at either end of the bow. In shooting, this bowstring is passed over a notch in a wooden trigger, with which the string is released, sending the missile forward at a good speed.

Boys also make rubber slings of a forked stick and a rubber band attached to a piece of leather for shooting birds.

Similarly, the slingshot, consisting of a diamond-shaped piece of leather to hold the stone, and two cords, one of which is released in swinging it, is also used in killing birds, or throwing at the sheep when herding.

altqí beədiltqáshi, (bow with which one taps it), toy gun.

bīyíldzīs, a groove.

bīdishké (biidéké, bīdeshkí). I cut a groove into it.

ǎlgīsh, it is cut out, or altqīntl'ól bá'algīzh, the notch for the bowstring.

benaháltqáhigi, the release, trigger.

beėjishtqāsh (beėjíltqāzh, beəzhdéshtqāsh), I shoot with it.

beədíshtqāsh (nt'ǎ), I shoot frequently.

naatsódi, (the stretcher), rubber sling.

beditl'fhi, slingshot.

adishtl'f (nt'ǎ), I throw the slingshot.

ajishtl'ín (adzíftl'ín, azhdeshtl'f), I throw (put) the slingshot.

THE GUN.

The modern gun has largely displaced the native weapons and few Navaho are without a sixshooter or rifle. Shotguns are not much in use.

A powderhorn was made of the horn of a goat or cow and the opening covered with goatskin. These are no longer in use.

Words have been coined for the various parts of the gun.



beëldó, a gun, rifle.

beëldó yázhě, a sixshooter.

beëldó nnázigi, a rifle.

beëldó nnázigi bidáznes-kánigi, the barrel of a rifle.

beëldó bizól, the magazine of a rifle.

bikéhediltóhi, front sight.

bikéhediltóhi dęg hōt'áligi, rear sight.

beëldó bijá', the hammer.

beëldó beältqíntlōl, trigger.

beëldó bitsín, gun stock.

beëldó bitl'á, the arm rest (curve in the stock).

beëldó baká', the cartridge.

beëldó baká' beëq'ín'ligi, the ejector (lever).

beëldó baká' aq'ín'li gúně', the breech of a gun.

The ejector is also called beëldó baká' qaha'n'li dé.

The breech block, beëldó baká' iy'ín'li qā'ín'ligi, which extracts the cartridge put into the barrel.

besh lichfi desdōn, a brass shell, empty cartridge, which is also called besh lichfi bitsá', the pocket of the shell.

beëldó baká', a loaded shell, or simply do-desdóda, not fired.

beëldó bīnātsī, a ramrod.

besh lichfi neintqáshigi, the percussion cap.

baká' bīhish'á (bīhí'â, bī-desh'ál), I load a gun, I put a cartridge into the gun.

bīhinásh'â (bīhaná'â, bīhā-desh'ál), I unload, or take the cartridge out of the barrel.

nnshgyēsh (nnīgīzh, údesh-gīsh), I cock a gun.

beëldó danákqēd yitsā', the click of a gun.

nná'nshgyēsh (nnā'nīgīzh, nná'deshgīsh), I leave the trigger down.

āqishtqād (aqíltqā, aqideshtqāl), I pull the trigger (on empty gun).

dishdōn (dēldōn, dīdeshdōl), I shoot, pull the trigger on cartridge.

beëldó baká' dīsdīniēi, cartridge forty caliber.

beëldó yisht'ód (yít'ōd, desh-t'ól), I wipe or clean a gun.

beëldó bīqāāsh't'ód (bīqā'í-t'ōd, bīqādesht'ól), I clean it out (inside).

bīqāāsdīs (bīqā'īldīz, bīqā-desdīs), I clean a gun (with a rod).

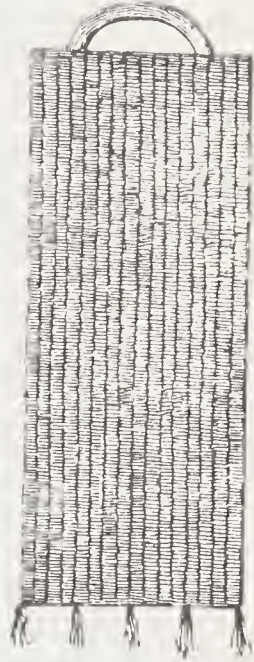
beëldó bīnāāstsī (bīnā'sétsī, bī'ūdestsī), I ram (clean) a gun.

NAVAHO HOUSES

The primitive dwelling of the Navaho is described as a mere dug-out, with a rude covering of a grass and yucca mat secured with yucca cords. This was entered by means of a ladder, which was drawn inside after use. When a change of domicile was made both the ladder and grass roof were taken along, the latter being rolled together in a convenient bundle and carried by a handle provided for this purpose.



With the growth of the tribe this primitive dwelling was entirely abandoned and the present types of the hogan, modeled after legendary patterns, were adopted. These are miserable, uncomely structures, in striking contrast with the high sense of harmony and beauty exhibited by the Navaho in his beautiful blanket and attractive silverwork. Presumably, this is due partly to the nomadic life of the Navaho, a trait which has undoubtedly had some influence upon his art as well as his dwelling. He has neglected, for instance, the art of pottery making as cumbersome, whereas it appeals strongly to the more sedentary Pueblo, and has carried the art of weaving to a remarkable degree of perfection, insomuch as it is not impaired by an occasional change of domicile. Thus, too, the Navaho house has every mark of a temporary and valueless structure, which is easily and quickly constructed, while affording just sufficient protection against the vehemence and severity of the weather. At a very recent date, however, the old type of dwelling is being partly displaced by a more commodious log or stone structure of the flat roof type. While these are fur-



nished with chairs, tables, and other modern furniture, the Navaho hogan dispenses with these luxuries, and is ready for occupation immediately after its completion.

The Navaho house is devoid of any decoration. Still, in the description of the legendary prototypes of the various hogans, the Navaho selects all that is gorgeous, splendid and precious in nature for their construction. The poles of the conical hogan, for instance, were made of precious stones, such as white shell, turquoise, abalone, obsidian (cannel-coal), and red stone, and were five in number. The interstices were lined with four shelves of white shell, and four of turquoise, and four of abalone and obsidian, each corresponding with the pole of the respective stone, thus combining the cardinal colors of white, blue, yellow and black into one gorgeous edifice. The floor, too, of this structure was laid with a fourfold rug of obsidian, abalone, turquoise and white shell, each spread over the other in the order mentioned, while the door consisted of a quadruple curtain of dawn, sky-blue, evening twilight and darkness. As a matter of course the divine builders might increase its size at will, and reduce it to a minimum, whenever it seemed desirable to do so.

Similar prototypes are mentioned for the other patterns in vogue to-day, as also for some others whose distinctive features are now added to the ordinary hogan in the course of various ceremonies. And since these details can not be supplied upon the modern stone or log structure, the ceremonies are ordinarily conducted in a distinctively Navaho hogan, which is built in addition to the modern structure. It is quite conceivable then, that originally the rubric required an especial hogan for every ceremony, though at present it is restricted to the so-called *medicine lodge*, sometimes in use at the night and other chants.

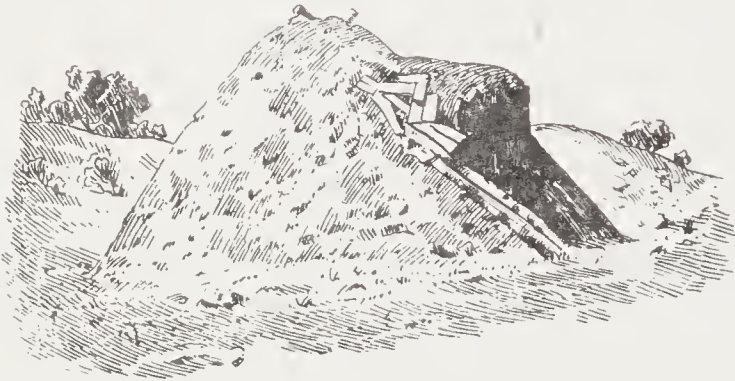
Custom does not seem to require a special dedicatory ceremony for the hogan, whether it be for daily or ceremonial use. It is indeed good religion to sprinkle the cardinal posts with meal or pollen, yet this may be done by anyone, or rather, it is the duty of the head of the family to do so, and the hogan is

then ready for occupation without further ado. The case of the *medicine lodge* forms no exception to this rule, since the sprinkling of meal is performed before the entrance of the singer into the lodge. In addition, there are other rites which may be interpreted as dedicatory for a special occasion. Thus, the insertion of twigs of wild cherry, oak or sumac, and of the *pokers* above the logs at the cardinal points, are evidently in the nature of a dedication preceding a ceremony. And the house songs (*hoghán biyín*), which by some authors have been mentioned in support of a custom of house dedication, are only incidentally such, and are essential to the vigil (*do-igházh*) or rite of blessing (*hózhóji*). This ceremony is performed frequently, and in one and the same hogan, to renew the blessing upon the members of the family and all their possessions, and since some twelve invocations (songs) are made upon the hogan on this occasion, they are referred to as house songs. Moreover, it is in accordance with good custom to have other ceremonies performed in a new hogan previous to the invocation of the house songs. In fact, this custom suggests that at times the new hogan is built for the purpose of having a desirable ceremony performed. For, while greater convenience makes a summer and winter home desirable at different points, and such natural causes as scarcity of range and water frequently decide in changing a location, this change is at times due to an evil spell which may haunt a vicinity. Should this continue despite all efforts to dispel such influence, a new dwelling is erected in some other locality, and its occupation inaugurated with some effective and purifying ceremony. Similarly, too, the hogan, which has been occupied by a deceased person, is instantly vacated and destroyed, and a new one erected in a different locality.

There are two distinct classes of residences, the summer and winter residence. The summer home is situate near the farm, while the winter residence is located at some point which offers facilities for fuel as well as range for the herds. More care, too, is expended upon the dwelling for winter, which is in

reality the home of the family, with such permanent fixtures as corrals, etc., added to it, while the summer residence often resembles an open air camp. Ordinarily, then, the term *kheqaf*, winter place, indicates the permanent home, and *kheshf*, summer place, a spot selected for farming purposes.

Of the various types in vogue to-day, the conical shaped hogan is generally preferred as typical and better suited for ordinary purposes, and is called *alchif' des'af*, interlocked points, from the three forked poles which support the entire structure. When a new hogan has been decided upon, the head of the family selects a suitable site, situate some distance from water, to insure its purity, and not too close to red ant-hills, a pest very much dreaded. This site is cleared of brush and weeds, and fairly



leveled. With the assistance of two or three friends the various poles needed in the structure are then hewn. Special care is taken in the selection of three symmetrical forked poles, whose length and thickness vary according to the desired dimensions of the hogan. In addition to these, two straight poles of about the same thickness and length are cut, and a number of smaller timber for the sides, including two forked posts for the doorway, are added. All timbers are trimmed of the bark, the smaller timbers often being spliced in two, where wood is scarce and distant. These are then left until ready for transportation.

The felling and trimming, which was formerly done with rude stone implements, is now done with an ax, and the logs and timbers are now transported by means of wagons.

The dimensions of the hogan are then obtained by placing the north and south pole in temporary position, and stepping off an equal distance east and west. A circle within the space thus obtained is now excavated to a depth of from six to eight inches, and a margin of eight to twelve inches wide left all around. This depression forms the floor of the hogan, while the margin serves the double purpose of strengthening the base for the poles and timbers, as well as furnishing a shelf or recess for depositing various household goods. Just outside the circumference holes are dug at the cardinal points in which to sink the timbers. This done, the two forked poles for the north and south sides are raised, locked and held in position, while an assistant braces them with the third forked timber from the west side, firmly locking it under the forked arms of the other two. The three poles thus firmly set in the ground practically support the whole framework, and accordingly studious care is exercised to have the arms firmly clutched and the base securely set. Another timber is then placed from the east side and rests upon the south pole, while the fifth, or dummy, just opposite, rests upon the north pole. The two poles just mentioned are set far enough apart to form a convenient doorway which always faces eastward. The four poles (taking the eastern poles as one) form the frame or skeleton (*sá'di*) of the hogan, to-wit, the eastern, southern, western and northern pole. The spaces intervening between the five poles are filled with smaller timbers, which rest on the three forked poles or on each other. They are set side by side, as closely as possible, leaving only the space for the doorway open. Here the two forked posts are firmly set in the ground just inside the base of the two eastern poles. When in position they are about four feet high, with a straight stick resting in the forks. Parallel with this lintel, and at a point about three feet from the apex, another stick is placed horizon-

tally across the two eastern timbers. The space between is covered with small sticks laid horizontally across two additional supports, or parallel from lintel to cross-stick. This forms the roof of the doorway, which projects slightly from the sloping sides of the hogan, much like a dormer window. The space between the doorposts and the inclining eastern poles, too, is filled with small timbers. The space, however, between the apex and the upper crosspiece of the doorway is left uncovered, and forms the smoke-hole, which frequently is reenforced at the lower end by a rude cribwork of ordinary sticks of wood to insure proper draught.

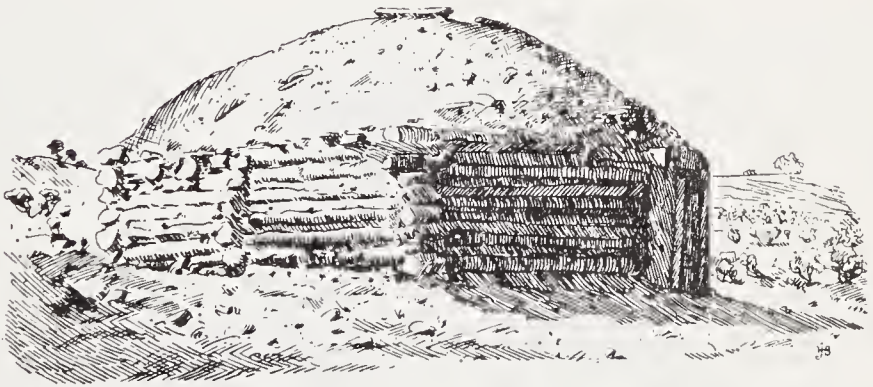
The crevices which appear between the small upright timbers are now filled with narrow strips or sticks of wood, and the whole covered with a layer of cedar bark. Starting then at the base, the whole is walled up with a generous layer of ground or mud to insure a water- and wind-proof structure. A curtain made of an old blanket is fastened to one of the posts for a door, which in cases of severe storms is doubled by an additional blanket attached to the sloping poles inside. The entry into, and exit from, the hogan is, of course, made in a stooped position owing to the small doorway. The hogan is now ready for occupancy. Many observe the custom of sprinkling cornmeal upon the posts at the cardinal points, or comply with it subsequently when it has been forgotten. A short invocation, such as *hozhó doléł*, or *hozhó áłfí*, may it be well or blessed, accompanies the sprinkling of the meal. This also applies to the other types of the hogan.

The round hogan. Another type much in demand is called *yá'dahaskháni*, under the round (roof), and is preferred when a spacious dwelling is desirable, or if long timbers are not available. Four forked timbers are firmly set into the ground forming a square. Heavy cross timbers resting in the forks north and south support two additional ones stretched east and west, the whole being the skeleton or framework (*sá'di*) of the

structure. The sides are walled up with smaller timbers set slightly slanting in the ground, and close together, with their tips resting on the cross timbers. The doorway structure projects in the same manner as with the preceding hogan, with the roof resting on the cross timber toward the east side. The roof proper is constructed of terraces of small timbers converging into an opening at the center, which serves as a smoke-hole. Thereupon the roof and sides are covered with cedar bark and dirt as with the preceding hogan.

This type of hogan is selected for the night chant whenever the ordinary hogan is considered too small for the paintings and other requisites of this chant. The specially built hogan is then designated as *hatqál biniyé' hoghán*, or the hogan for a ceremony (ceremonial hogan). And while some do not hesitate to occupy it after the close of a ceremony, others object to its use on religious grounds, for which reason, and owing to its dimensions, many ceremonial hogans remain unoccupied.

tsínditlín, walled logs, designates the heptagonal or octagonal structures which are occasionally built in mountainous and other



districts where timber is available. The logs are slightly hewn down at the angles where they cross each other, to obtain a firm lock. Several layers are built on top of each other to a height of from five to six feet, and support a roof of the same

type as in the preceding hogan. At the entrance piles are driven into the ground on each side of the wall of timbers to hold these in position. A crosspiece over the outer of the two posts finishes the framework of the door. The crevices between the timbers are closed with small sticks of wood and mud-plaster, while the roof is finished as in the preceding type. This hogan is the most spacious of Navaho types since it is devoid of all uprights inside, though at present many add this feature.

The square loghouse is comparatively modern, and is designated as *tsfn beekhīn*, house of logs. The timbers are always trimmed, and at times hewn square, so as to make a snug fit requiring very little plaster at the joints.

At a recent date houses of stone, of a single story and flat roof, are much in favor, and are designated as *tse beekhīn*, house of stone. They are built by Navaho masons of native rock and mud mortar.

Shelters, called *chahă'ó*, shades, are constructed during the warm season for the sake of convenience and shade. Four posts,



usually forked, are set into the ground with crosspieces stretched from post to post. This framework is sometimes limited to two, and even one forked post, to receive the ends of cross-

pieces, which rest in the branches of a tree or on the ground. The top and sides are covered with boughs of cedar or piñon, stalks of reed, or dry grass, or a blanket. A rapidly constructed hogan or shelter (hohǎn shichídi) sometimes consists of a rude framework of small timbers set up after the fashion of a conical hogan, and covered with boughs of piñon and pine bark. In the rainy season a rude framework supports a layer of branches, or stalks of reed, against which the soft mud taken from the surface is shoveled from the base up. When dry the hard plaster affords sufficient protection against the sun and the light showers of midsummer. Shade is at times obtained by planting cedar or piñon boughs in a circle, without any covering or roof, and with only a blanket secured at the entrance (íł bechaha'ó). In journeying, herding sheep, or freighting, a wind-break or corral of cedar boughs, erected on some sheltered hillside, or below a shady tree, often serves as a temporary abode (ílnázt'í'). The permanent corral (anázt'í') is usually constructed of posts set side by side in a circle near the hogan, and is used for protecting the herds at night. Stables for the horses or cattle are not built.

The enclosure for public dances is erected after sundown, and is constructed of cedar and piñon boughs, with one entrance in the east. It is therefor called ílnázt'í', circle of branches, or ílnáshjín, dark circle of branches.

WORDS REFERRING TO THE HOUSE

kheqaf, winter place or residence.

kheshf', summer place or residence.

hohǎn, the hogan.

khín, the house.

lēhogyédgo hohǎn, the dugout of early days.

lēhogyéd, a modern cellar.

ǎłchf' des'af, interlocked points, the conical hogan.

yá'dahaskháni, (which is hollowed below), round hogan, which is also called hohǎn bijád hulóni, the hogan with supports.

tsíndítłín (tsídítłín), walled logs, the heptagonal hogan.

tsebígo dá'ádítłín, (eight walls), or tsebígo aqâ'déníl, (eight put together), the octagonal hogan.

tsébēkhīn, house of stone, stone house, also called tsē'nástłingo behoghān. the hogan of walled stone.

tsín bēkhīn, loghouse.

hatqál biniyé' hoghān, ceremonial hogan.

chāhā'ó, shade, shelter, summer hogan; also used for veranda or porch of an American house.

lēhogyédgo chāhā'ó, dugout shelter.

hoghān shichídi, stacked hogan, dirt roof shelter.

īl bechāhā'ó, the shelter of boughs.

yā'dahaskhānigo chāhā'ó, a round roof shelter (supported by four posts); also chāhā'ó nakhi bijádi, two upright shelter, and chāhā'ó dalaí bijádi, with but one upright. These are also called chāhā'ó shichídi, stacked shelter, which usually have a roof of branches or grass.

akāsht'ōsh behoghān, bark covered hogan (for summer).

lēsh aqídítłín hoghān, the hogan walled with dirt or mud-plaster.

īlnāztī', circle of branches, a wind-break or corral of branches.

hoghān ashlé (íshlā, adesh-kí), I build a hogan, I make a hogan; ashlé, I make, is also used with the various types, thus: alchí' des'aí ashlé, I am making a conical hogan, or chāhā'ó ashlé, etc., I am building a shelter.

hatqál biniyé' hasbí', or hatqál bahasbí', a hogan built for a ceremony.

hatqál biniyé hashbí' (qosél-bí', qodéshbí), or hatqál báhashbí' (bahosélbí', bahodeshbí), I trim for the ceremony, I build a ceremonial lodge.

yáhatso, large inside, a spacious hogan (for ceremony).

tsín kínshné' (kínlné', kí-deshní), I fell a tree.

báhasht'ōsh (bakāsht'ōsh), or bakhági bēshné' (bēlné', bídeshní), I remove the bark, trim a log.

tsín aqáshkhāl (aqálkhāl, aqádeskhāl), I split a log.

tsín áqidishkhál (aqidíkhāl, aqídideskhāl), I chop a log in two.

báhasht'ōsh béstsēl (bētsēl, bīdestsīl), I trim, chop the bark, or báhasht'ōsh bēshdlād (bēldlād, bīdeshdlāl), or báhash-t'ōsh besóz (bēzōz, bīdesōs), I trim (tear) the bark.

tsīn néheshkhāl (nehēlkhāl, nihideshkhāl), I split in strips.

tsīn aqáshné' (aqálné', aqá-deshnīl), I chop a piece from a log.

tsīn aqádashné' (aqádasēlné', aqádadeshnīl), I hew pieces from a log.

tsīn neheshné' (nehēlné', níhideshnīl), I cut strips or sticks of wood.

tsīn yishqēl (nīyí, deshqēl), I transport logs (on my back or in wagon).

chīzh (tsīn) nshqē (nnīyí, ndeshqēl), I pack wood or small sticks (for fuel).

tsīn (chīzh) yishjīl tīōl be (nījīd, deshjīl), I pack logs (or fuel) on my back (with a cord or blanket).

bīnesh'ā (bīnel'ād, bīdīnesh-āl), I make a mark, take measure.

nīkhīdistse (nīkhīdītse, nīkhīdīdestsī), I place on the ground for a mark, I mark off.

ālchī' adistsē (ālchī' adētsī, ālchī' idētsī), I lock the forks.

tsīn báqahashgyēd (baqahó-gyēd, báqahodeshgūl), I dig out for the timbers.

tsīn nābidiyishlā (nābidiyis-sá', nābīdīdeshlāl), I raise the poles.

tsīn ashtē nnshtqī (ashtē nūntqā, ashtē ndeshtqīl), I place the poles in position.

hoghān bijād ādaastsī (ada-sētsī, ādadestsī), I set the posts (for the round hogan).

tsīn nāda'dashtqī (nāda'da-sētqā, nāda'dadeshtqīl), I lay the timbers horizontally.

tsīn nāgo yishtlīn (nāgo sētlīn, nāgo deshtlīl), I wall horizontally, I put the roof on.

tsīn dā'dishtlīn (dā'dītīlīn, dā'deshtlīl), I wall up with timbers (for the walled log-house).

sā'di, (which is raised), the skeleton or framework of the hogan.

sā'di halgīshi, the forked timbers for the hogan.

tsīn halgīshi, a forked pole.

Individually, the timbers of the conical hogan are sometimes designated as:

shadā'ādæ na'ái, the pole from the south.

nāhokhōsdæ na'ái, northern.

ǎǎ'ádǎ na'ái, the western.

chǎētqīndǎ na'ái, the pole from the doorway, the eastern pole.

bijád, the uprights (of the round hogan).

qǎ'ǎ'ǎji nǎnǎ'áhigi, the eastern (horizontal) beam.

shadǎ'ǎji nǎnǎ'áhigi, the (horizontal) beam to the south.

ǎ'ǎ'ǎji nǎnǎ'áhigi, the (horizontal) beam in the west.

náhokhǒsji nǎnǎ'áhigi, the beam in the north.

nǎnǎ'ǎ', resting horizontally.

i'ǎ' (i'ǎ'), resting or projecting vertically or perpendicularly.

qani'ǎ', extends slantingly.

bíyahani'ǎ', resting against and under (like a brace).

sǎ'di bǐdanishnǐl (bǐdǎnǐnǐl, bǐdadǐneshnǐl) I place (the small timbers) between the framework.

tsǐn bēhēshtǐn (behétǐn, behidēshtǐl), I raise the poles.

biyádi bǐnǐzhǒzhi, or bǐnǐnǐligi, the side timbers or walls of the hogan.

bakháde nanzhǒzhi, the roof (of round types).

chǐlǎyǐ' nanǎ'ǎhi, crosspiece of the smoke-hole.

ǎkstǐn, built convergingly, walled with horizontally laid logs.

chǐlǎyǐ' bídǎgi, rim of the smoke-hole.

chǐlǎyǐ' dǎhaditǐn, or naǎstǐn, crib-work around the smoke-hole.

chǎētqīn silǎf, door-jamb or uprights.

chǎētqīn silǎf nǎnǎ'áhigi, the lintel.

chǎētqīn bakhǎi nǎnǎ'ǎhi, roof beams over doorway.

chǎētqīn baghádi nanzhǒzhi, doorway roof (bridging).

chǎētqīn bǐnǐnǐligi, or chǎētqīn biyádi bǐnǐzhǒzhi, sides of doorway.

destsǐn bakáshtǒsh, piñon bark on the log.

destsǐn bakhǎgi, the hide (white rind of piñon).

dǐlkǐs bakhǎgi, green cedar bark.

azhǐ', dry bark.

dǐlkǐs bizhǐ', dry cedar bark.

dǐlkǐs beēzhǐ', with the bark of cedar.

azhǐ' beheshjégi, the dry bark covering.

ǐl, boughs of conifers.

gǎd bi'ǐl, juniper boughs.

ndishchǐ bi'ǐl, pine boughs.

hoghán bēhúis'nīl, the hogan covered with dirt.

æhúis'nīl, covering of dirt (on the hogan).

hoghán daashdlīsh, or da'ishdlīh (dashēdlīsh, dá'deshdlīsh), or akán (meal), tqādīdīn (pollen) bedaashdlīsh, or beda'ishdlīsh, I sprinkle the hogan with pollen.

Certain parts and spots of the hogan are sometimes especially designated:

chīlāyī', the smoke-hole.

chāēetqīn, the exit or door.

dadīnābāl, curtain or door.

nākātāi dasābāligi, a cloth curtain for the door.

dāndēlkhāl, a (noisy) door (on modern houses).

hoghán bīnahasgyēdi, excavated floor area of the hogan.

lēshqtā', ground or floor.

hoghán bitqātā', crevice or recess in the hogan.

nāstlā'ji, in a nook or angle, (at the base of a timber, or the space between the uprights and the wall of the hogan). Thus, jīsh bināstlā', or banāstlā', the recess or space reserved for masks at the night chant, in the western angle of the hogan.

hūntā' ādas'āhigi, twigs inserted in the crevices of the hogan at the cardinal points.

khōnīkē' (khūnīkē'), the hearth or fireplace.

bikīji i'nolkhād, is sometimes used for the pole in the west of the hogan.

ntsītłā', at the base of the western pole.

yūnīd, between the fireplace and the pole in the west.

hunābā', around the fire, the space around the fireplace.

hunshqā', designates the east, south and north of the fire.

yā'alnf, the space between yūnīd and the fireplace, just west of the fireplace.

bahāstlā', at the base of the door posts or timbers.

yūnē', inside the hogan.

tlōdi, outside the hogan.

hoghán binēdi, behind the hogan (west).

bakhāde, or hoghán bakhā, on top of the hogan.

hoghán chōhunshō (chōhuūshō', chōhodeshō), I sweep the hogan.

bināhojītqāl, a ceremony is going on in the hogan.

hoghán tqanāōshnīl (tqaisēnīl, tqaidesh'nīl), I tear the hogan down.

hoghán bīhodishnīl (bīhō-
dīnīl, bīhodīdeshnīl), or ho-
ghán dishlīd (dīlīd, dīdesbīl),
I burn the hogan.

hoghán nā'ishlě (nā'flō', nā'-
ādeshlō), I pull the hogan
down with a rope.

hoghán nā'nshkhād (nā'anīk-
khād, nā'adīneshkhāl), I pull
the hogan apart (by spreading
the poles out).

hoghá' ānshkhād (anīlkhād,
adīneshkhāl), I destroy the
hogan (by throwing the poles
in a heap).

hoghán (hoghá') anīkhād, a
fallen hogan (which is in a
heap).

hoghán nā'anīkhād, a de-
stroyed hogan (fallen side-
ways).

hoghán nīlās, hogan which
fell in.

hōkē'ghán, a deserted ho-
gan (owing to death). This
is also used for the site on
which the ruins of a burnt
hogan are visible.

nīya'kēd, vacated ruins.

THE SUDATORY

From the preceding account of the hogan and its meager fur-
nishing the inference seems justified that the Navaho is indifferent
to bodily cleanliness. Indeed, a modest few make it a point to
wash themselves in the morning, and procure such modern arti-
cles as soap, basin and towel for the purpose. It is also well
known that occasionally, say once or twice a week, the head and
hair are thoroughly bathed with yucca suds. The saponaceous
roots of this plant are dug out, crushed to a rough fiber, and
well shaken in a basin or bowl of water, producing a very rich
lather. This, and the plant itself, are therefor called tqálawhūsh,
soap. When the hair has been well soaked, and the lather
worked down to the skin, the surplus water is thoroughly wrung
out by twisting the hair with the hands. The bather then throws
the hair backward and exposes them to the sun to dry, after
which they are brushed with a whisk broom and done up in the
usual fashion.

Not a few keep the hogan neat and clean, removing all surplus

sand with a broom made of a bunch of mountain grass, and burning and throwing the offal to the dogs. Pelts and blankets used for bedding are occasionally spread out on a tree for airing, though frequently they are rolled up in the morning and put aside without further ado. Accordingly, old pelts, which have become infested with vermin and lice, are disposed of at the stores. Shirts and pants, skirts and jackets, are worn by men and women, respectively, until they become useless, and another outfit is made by each individual. Clothes are not washed as a



Native Broom

rule, but discarded when too filthy, and the wardrobe ordinarily consists of what apparel one has on his person, with an additional coat and pants, jacket and skirt, for festive occasions.

Yet, withal, the Navaho uses the sudatory with greater frequency than such indifference to bodily cleanliness might warrant, and thoroughly enjoys the luxurious pleasures of this primitive bath, some frequenting it as often as two or three times a week.

The sweat-house or sudatory is the conical hogan in miniature, with the doorway structure omitted. The entrance to it is variously placed, but most frequently it faces westward. A number of stones, thoroughly heated over a fire, are rolled into the hut and placed on the north side, owing to the belief that colds and cough originate in the north so that the heated stones, placed between the bathers and the north, obstruct their passage. The bathers strip to the breechcloth (women to the *tlákhǎł*, or loincloth) and enter, or rather crawl, into the hut. Though its dimensions are frequently from four to five feet in diameter, and less in height, it is not unusual that from ten to sixteen bathers enter the hut at one time, as a large number of bathers

is conducive to rapid perspiration. To obtain this object water is at times sprinkled upon the stones after the entrance has been closed with a blanket by the last of the bathers. They remain in this confinement as long as twenty minutes, and on leaving it roll themselves in the sand to remove the scales of surplus skin. Many reenter and repeat the same process several times. In the vicinity of streams the bathers finally plunge into the water, otherwise they don their old clothes and return home leaving the hut undisturbed for future use. The effect of the sweat-bath is one of momentary drowsiness, which is soon followed by one of



renewed vigor and refreshment. Accordingly, it is used both in summer and winter, and always at daytime, while in time of war, and at present in exceptional cases, it is frequented at night. Women, too, enjoy this bath, but always alone, and not as frequently as the men.

In accord with legendary accounts, the sudatory often figures in the course of various ceremonies. Thus, in the night chant, a sudatory is erected at each of the cardinal points. On four consecutive days the patient submits to the sweat-bath in one of these, starting with the sudatory in the east, and completing the circle in the north by way of the south and west, while the

singer decorates it with a figure representing the rainbow, and made of vari-colored sands. In the chant called *diné' bínchǫjǫ*, or wind chant, the order is reversed, and the drawing is made inside the hogan, while the patient is confined in the sudatory. However, these sudatories, in deference to legendary prototypes, consist only of the framework or poles, which are covered with pelts and blankets to receive the drawings, in lieu of the ordinary covering of dirt. When the drawing of the rainbow has been completed the patient is released. Such afflictions as colds, fever, stiffness and inertia are said to be dispelled by the (ceremonial) bath.

WORDS.

tqáchē, or *tqáchē baghán*, the sudatory.

tqáchē ishlē, I built a sweat-house. This is also expressed by *tqáchē ndinshjē* (*ndinljē*, *ndideshjǫ'*), I build the fire for the sweat-bath, hence, *tqáchē ndinljē*, the sweat-house is ready.

tqáchē dītǫsh, let us take a sweat-bath.

tsē' ínǫl, it is ready.

tsē' ishnǫl (*tsē' ínǫl*, *adesh-nǫl*), I place the stones inside.

tqáchē yishǫ (*yīyǫ*, *deshǫl*), I am entering the sweat-house.

tqáchē yītǫsh, or *yijē*, we will enter together.

tqáchē shijē, we were in the sweat-house.

tqáchē sētqǫ, I am in the sudatory.

tsē' yanǫstsē (*yanǫtsǫ*, *yēidestsǫ*), I put the stones on a heap (for fire).

tsēnishgǫ (*tsēnishgǫ*, *tsē' dīneshgǫ'*), I heat stones.

tsē' nīgǫ, heated stones.

tqáchē yish'nǫ' (*yish'nǫ'*, *desh'nǫ'*), I enter (crawl into) the sudatory.

tqáchē sēdǫ, I am (sitting) in the sudatory.

tqō shǫhatqēl (*shǫhǫtqēl*, *shǫhadotqēl*), I am perspiring.

hatqǫsǫl sēlǫ (*hazlǫ*, *hodolēl*), I perspire freely.

tqáchē qanǫshda (*qanǫsdsǫ*, *qadeshdǫl*), I leave the sudatory.

lēsh ǫdǫnanshde (*ǫdǫnanǫshdē*, *ǫdǫndīneshda*),—I rub dirt over my body.

lēsh bīnāsh'nā' (bīsīs'nā', bīdēsh'nā'), I roll in the dirt.

lēsh adēshjī' (adishīshjā, adīdeshjī), I sprinkle dirt over myself.

(tqāchēdæ) tsě' chænsnīl (chāensh'nīl, chāedesh'nīl), I remove the stones from the sudatory.

tsēnīzīl tqō bikēshkhā' (bikīsākhā', bikīdeshkhā'), I sprinkle water on the stones (with a cup or vessel) for steam, or tqō bikēshkhād (bikīsēlkhād, bikīdeshkhā'), I sprinkle it with my hand.

tqāchē tqanāōsh'nīl (tqaisīs'nīl, tqāidesh'nīl), I tear down the sudatory.

tqō benāsh'nā' (besīs'nā', bedesh'nā'), I plunge into the water.

tqō benāsmās (besāmāz, bēdesmās), I roll in the water.

tqō akēheshkhā' (akēhēshkhā', akīhideshkhā'), I sprinkle myself with water (with a vessel), or tqō akēhēshkhād (akēhēshkhād, akīhideshkhā'), I sprinkle water on myself with my hands.

tqænsdzīd (tqænésdzīd, tqædīnesdzīl), I plunge (dive) into the water.

tqāltlā' yishyēd (tqāltlā' yishwhūd, deshwhūl), I dive (run) into the water.

nashbē (nsēbī', ndeshbēl), or nā'āshkhō' (nāsēlkhō', nadeshkhōl), I swim.

do-nā'āshkhō'da, I can not swim.

tqāltlā' yishgé (tqāltlā' yīgō', tqāltlā' deshgō'), and tqæhishgyé (tqæhīgō', tqædeshgō'), and tqæhishtlīsh (tqæhītīzh, tqædeshtlīsh), or tqāltlā' yishtlīsh (yītīzh, deshtlīsh), I plunge (fall) into the water.

nash'ēl (nsē'ēl, ndesh'ōl), or dā'nash'ēl (dā'nsē'ēl, dā'ndesh'ōl), or dā'nā'āshkhō' (dā'nsēlkhō', dā'ndeshkhōl), I swim (float).

qadishjā (qādishjā, qādīdeshjī), I strip, undress.

qadish'nē (qādisdzā, qādīdesh'nīl), I dress again.

adēnā'ishtlīn (adēnā'iyēsh-tlīn, adēnā'diyesh-tlīl), I put my clothes on again.

shikhē bi'nāstēs (bī'nāstēs, bi'ndēstīs), I put my moccasins on. Similarly, sīstlē, (leggings), shitlājī'ē, (my pants) bī'nāstēs.

ādīnshkē' (adinēshkē', adīdīneshkēl), or nāneskāz (nānīkāz, ndīneskāz), I cool off.

shi æ bī'nāshdā' (bīnāsdzā, bī'ndeshdāl), I put my shirt or coat on; also chalékho, (vest), shi ætso, (overcoat or coat) bī'nāshdā'.

natsílíd bēikhá, sand-painting of the rainbow.

sitsí tqanásgīs (tqaségiz, tqádesgīs), I bathe my hair.

tqálāwhūsh, lather, soap.

tqálāwhūsh tqayishkhá' (tqayíkhá', tqadeshkhál), I make the lather.

tqálāwhūsh tqáosh'ní' (tqaiséní', tqaidéshní'), I stir the lather.

tqálāwhūsh hanshtqá (hané-tqā, hadíneshtqál), I hunt roots (amole).

tqálāwhūsh hashgyéd (há-gyéd, hádeshgöl), I dig out soap (root).

tqálāwhūsh qashtqí (hatqá', hádeshtqíl), I take the root out.

tqálāwhūsh yistsíd (yítséd, destsíl), I pound the roots.

sitsí náłtsa (náłtsaí, ndoltsí), I dry my hair.

sitsí tqóbâyishqād (bâyī-ghād, bádeshqāl), I shake water out of my hair.

sitsí tqóbâyishní' (bâséní', bádeshní'), I wring my hair out.

sitsí beēshtló (besétló', bedéshtló'), I tie my hair.

sitsí yishó (yíshō, désho), I brush, comb my hair.

sitsí kībídesho (kībīshéshō kībīdéshe), I brush my hair.

sitsí, or tsīghá yishé (yíshē', deshí), I cut my hair.

tsīghá dishlíd (dílíd, dídeshlíl), I burn the hair.

tsīghá nashbézh (nt'é), the hair are scattered. The Navaho burn the hair after cutting, so that they may not be scattered to the winds.

tsīghá ndéztqād (nt'é), scattered hair.

tsīghá názhjöl (nt'é), tufts of hair lying here and there.

tsīghá nikhídel'á' (nt'é), the hair is scattered.

tsīghá nikhídiíntqād (nt'é), the hair is scattered in every direction.

RELIGION

The elaborate system of religious worship among the Navaho lets them appear as a very religious people. Their anthropomorphous deities are numerous and strikingly democratic, each excelling in his peculiar sphere of independent activity and power. They are described as kind, hospitable and industrious; on the other hand as fraudulent, treacherous, unmerciful, and, in general, subject to passions and human weaknesses. Their lives, to a great extent, are reflected in the social condition of the Navaho as, for instance, in the subordination to local headmen, in the manner of farming, hunting, ceremony, etc., all of which find an explanation in previous occurrences in the lives of the holy ones. This is especially true of the ceremonies or chants, most of which have been established by the *diyíni*, or Holy ones, for removing evil.

The existence of evil is attributed to the wrath of the *dinǣ'ě'*, or Peoples, such as the Animals, Winds, Lightnings, etc. Much evil, disease and bodily injury is due also to secret agents of evil, in consequence of which the belief in witchcraft, spells, dreams and *shooting of evil* is widely spread. Accordingly, too, of the two forms of worship, one against evil (*hochǫji*), the other for blessing (*hozhǫji*), the former is presumably in greater demand, but is subordinate to, and always accompanied by, the latter.

The idea of a creator of all things is unknown to the Navaho, as also that of heaven or hell. The belief in a life hereafter exists, however, and is a life of happiness with the peoples of the lower worlds among whom the deceased are numbered. The deceased, in turn, may injure the living.

The average Navaho is loath to study the intricate fabric of his religion and knows little of it beyond ceremonial performance. The singer or shaman, usually a man of excellent memory, is entrusted with whatever pertains to subjects of worship, though probably no single one is versed in all of its branches. Moreover, the knowledge of the legend which attaches to every chant is not a material requisite for properly conducting a ceremony, though the legend furnishes the clue for corrections.

The following synopsis, taken from unpublished legends in our possession, presents the most salient features of Navaho worship, together with other subjects of a religious character.

THE LOWER WORLDS

The legends speak of twelve lower worlds, the home of various Peoples (*dinǎ'ě'*). These worlds were small in size, and are referred to as chambers (*dahunǎkhá'*), which are numbered as the people pass through and stand on the several vaults. Their *speech* in the several worlds, too, is recorded; hence, the roof or vault of the first world is called *sād laí*, the first speech; the vault of the second, *sād nakhí*, the second speech; similarly, *sād tqā*, *sād dī*, *sād ashdlá'*, *sād hastqá'*, *sād tsöstséd*, *sād tsěbí*, *sād naastáí*, *sād nezná*, *sād ładzáda*, *sād nakhidzáda*, the third to twelfth speech, the latter of which we now occupy.

Furthermore, these twelve worlds are subdivided into three divisions of four, the first four being referred to as *ní'hodilqil*, or the dark world; the subsequent four as *ní'halchí*, the red world, and the upper four as *ní'hodotl'ish*, the blue world. Some of the chant legends (*hatqálkě*) begin with events in one of these three groups of worlds. In this manner some speak of five, others of eight worlds, etc.

THE PEOPLES OF THE DARK WORLD.

The above mentioned worlds are not spoken of as having been created, but as already existing. The first world (*sād laí*) is inhabited by the Ant People (*wolazhin dinǎ'ě'*) who are subor-

dinate to chiefs or spokesmen in the east, south, west and north. In the second world (*sād nakhí*) they find *wóneshchīndi hastqín* and *wóneshchīndi esdzán*, the Locust Man and Woman. The third world (*sād tqā*) being uninhabited all of these peoples travel to the fourth world (*sād dī*) where the following persons are found: *atsé hastqín*, First Man; *atsé esdzá*, First Woman; *atsé hastqín*, First Man; *atsé esdzá*, First Woman; *atsé hazlí*, the First Made; *akédæ hazlí*, Second Made; *atsé ashkhí*, First Boy; *atsé atéd*, First Girl; and *atsé hashkké*, the First Angry, or Coyote. First Man and his eight companions are the first witches (*idantí*), and the cause of sickness and fatal diseases.

níbil hodidezlí, he who originated with the earth, is applied to First Man (*atsé hastqín*). The name corresponds with the sacred name of the kit-fox.

THE PEOPLES OF THE RED WORLD

The Peoples of the four preceding worlds ascend to the fifth world (*sād ashdlá*) where they are joined by *wósækīdi hastqín* and *wósækīdi esdzá*, the Grub Man and Woman. The sixth world (*sād hastqá*) is uninhabited. The seventh world (*sād tsostšed*) they found inhabited by the *nishdúi dinæ'ë*, the Cat People. They also met *nashjéi hastqín* and *nashjéi esdzá*, the Spider Man and Woman. The Cat People were *adilgáshi*, evil shooters (witches), who filled the bodies of their neighbors with evil by shooting. First Man removes this power from them and makes it his own property.

sād tsebí, the eighth world, is the home of *áshí hastqín* and *áshí esdzá*, the Salt Man and Salt Woman, and also of *hashchéhzhini*, the black *hashché*, or Firegod. (In the legend of witchcraft the latter is introduced with First Man and his companions in *sād dī*, the fourth world.) The Ant People, of whom mention was made first, also find another colony of Ant People with whom they immediately associate. The *tísh dinæ'ë*, or Snake People, are also introduced here, together with the *sási*

dinǎ'ě', Yucca People; and qōsh dinǎ'ě', Cactus People, dōtso, the Big Fly, nikǎ'ni, a beautiful bird (Owl), and mǎi' dotlīsh, the Kit-fox. First Man erects the first hogan here, the type for the present hogan. He then displays all the material for the future sacred mountains, for the dawn, the sky-blue, the twilight and darkness, the future winds, rains, lightnings, the future hashchě, and so on. To each and every one he presents some of his evil power, so that all are possessed of witchcraft.

But he also designates various herbs as a remedy for all evils, poisons and diseases which he has distributed, and designates the ketān (prayersticks) and sacrifices necessary to remove them. All of the above mentioned peoples therefor require a sacrifice (biyǎl).

THE PEOPLES OF THE BLUE WORLD

When First Man and his now numerous companions entered sād naǎst'ǎi, the ninth world, they found it in possession of the beautiful wolachī litso altsīsigi, the very small Yellow Ant, who were in communication with wolazhīn altsīsigi lizhīn, the small Black Ants of sād neznǎ', the tenth world. By fraudulent means First Man and the Salt Man deprive them of their various juices or grease (akǎ'), their only possession and sustenance.

THE ELEVENTH WORLD

The place of emergence in sād ladzāda, the eleventh world, is called nīqǎogaī, whitish earth. The peoples of this world are very numerous, counting among their numbers a group of nash-dūi dinǎ'ě', Cat People, the Bear and Deer Families, Foxes, Badgers, Skunks, Birds, Fishes, and finally Water Monsters. The people of the land are subordinate to the Big Wolf chiefs in the east and west, while the Wildcat chiefs are spokesmen in the northern and southern villages. These direct their subordinates in farming and the chase. The domestic labors and functions are assigned to the female portion, and all spare time

is devoted to various sports, as the bouncing stick game, dice, hoop and pole, football, etc.

This happy and innocent life undergoes a change when First Man introduces generation, which until then had been unknown to these peoples. An altercation between the chief of the east, Big Wolf and his wife, over the neglect of her duties, is the cause of the separation of all men from the women. Accordingly, at tqó alnáosdlĩ, where the waters flow in various directions, the men cross to the opposite shore in boats.

The men now set about their duties of farming and hunting. The domestic duties of cooking and grinding corn are supervised by one nádle, an hermaphrodite. The ceremonial method of planting is observed here for the first time. Thus they had the circle, the square, the border, and additional farms. Hunting, too, is accompanied by various ceremonial observances. Their leisure time was given to amusements. Venereal excess is punished instantly in mysterious ways, though it is always removed by the power of some ceremony. Respect for these is also drastically inculcated by making an example of a stray coyote.

The women neglect their duties while the men are thrifty. Their passions wax strong, and they become guilty of many immoralities. In seeking suicide, many drown themselves without having the hope of resuscitation by ceremony. From want and starvation they are finally driven to plead for mercy, after a period of about nine seasons of separation.

The rennion is the occasion for a ceremony of purification, including sweat-baths (tqäché). The routine of labor is again harmoniously followed out as before the separation, the women assisting their husbands in planting and harvesting. Incest is pointed out as the cause of mental derangement. Witchcraft is deftly punished by First Man, and checked in this manner. Diseases of various kinds, such as blood-spitting, etc., are cured by the rites. Dreams are invariably considered as portending evil. Presently, too, it occurred that at'éd diyfni, the Holy Girl, a virgin (khâ' álini), who had been impregnated by some

unknown stranger, gave birth to a shapeless mass, a gourd, from which sprang two male children. These gourd children (adé ishchíni) rapidly attain maturity and develop a love for retirement and roaming.

THE EMERGENCE FROM THE LOWER WORLDS

The Coyote of the west, náhotsoi alkinádel má'i, who joined the people below, was an inquisitive fellow. It happened that one of the children of tqé hóltsödi (Water Ox) was discovered one day floating on the waters near their camp. The Coyote unobservedly took possession of it, hiding it in his garments. Presently the waters from all directions threatened the People with destruction, which is averted by First Man who hurriedly created four mountains for them, which he bids them ascend. The Turkey is charged with checking the rise of the waters, which he does by placing his tail in them. But when the waters had risen to the summit of these mountains the Gourd children were asked to assist. (They had entered the camp shortly before the flood, each carrying a reed (lúkätso) in his hand, one taken from the west, the other from the east.) The elder of the two boys then placed his reed on the summit of the mountains, and when the People entered, the twelve joints of the reed increased in size as they ascended allowing them to gain a considerable height. The waters, however, still continued to pursue them, so that the reed of the younger brother was placed just over the other. But when, after traveling through the twelve joints of this reed also, the waters continue to rise, their suspicions are finally turned toward the indifferent Coyote. He is searched by the Loeust, and the discovered child is replaced on the turbulent waters which immediately became stationary. The hard roof or vault which they had reached is successfully pierced by the Wolf, the Bear, the Badger, and finally by the Loeust, who is then sent to investigate this upper world.

Here the Locust encounters a monster from the east who challenges him to pierce his mouth and rear with arrows. The Locust, however, pierces his sides, after removing his vitals, and obtains possession of the land. He is forced, in turn, to meet a similar challenge from monsters in the south, west and north, whom he defrauds in a like manner.

Upon his return to his companions they dispatch *nāaskīdi*, Hunch-eye, and *tsétqādebě*, the Bighorn, to remove the waters and make the earth inhabitable. The former discharges zigzag lightnings east and west, the latter straight lightnings north and south. The ensuing rush and uproar of waters forces them to a hasty retreat into the opening, which is covered by the webs of the Spider Man and Woman. And when the tumult has finally subsided the Wind People (*ńłchī' dinǎ'ě'*) were dispatched to dry up the surface of the earth. Thereupon, the exit is made by means of ladders which had been made by First Man for the occasion. The emergence is called *hajīnai*, moving upward.

THE TWELFTH OR PRESENT WORLD

The earth was small in size, and here and there small bodies of water were observed. Some of the people camped at the shores or banks of these lakes and were known as *tqābā dinǎ'ě'*, the people at the edge of the water; others made huts of mud (*hashtīshnī*, mud people); others camped below a ledge of rock, and so on, each being designated by a peculiarity of this kind. And when it developed that one of their number was missing a search was made for him. He was finally located in *hajīnai*, the place of emergence, but refused to leave, saying that the future people of the earth would return there. Therefor, the people of this earth (*nīhokhǎ dinǎ'ě'*) return to *hajīnai* after death. The person remaining there sallies forth at times to collect food and pieces of broken pottery which have been left at the habitat of the deceased, for he promised his companion to do this.

THE CREATION OF THE VISIBLE WORLD.

The events after the emergence, as embodied in the legends, are called *diyínkěgo oqótĩd*, it happened in the holy way, or the holy events.

The *diyín dinǎ'ě'*, Holy People, then decided to make the earth a suitable dwelling for its future inhabitants (*nĩbokhá dinǎ'ě'*). Accordingly, after First Man had built the hogan (*hoghán*) he created the sky, earth, sun and moon. As a material he used various precious stones, giving to each the shape of man, and breathed the spirit of life into them. He also created summer and winter, which he assigned to the earth (*nahosdzán*) and sky (*yádlqil*) respectively.

CREATION OF THE STARS.—*hashchězhini*, the Firegod, placed the various constellations in their respective positions. He is also accredited with blowing the stars of the milky way across the sky. Such other stars as he wished to keep in reserve were scattered by the Coyote (*atsé hashkhé*) over the heavens. The Navaho, therefor, have no names for many constellations. The Coyote planted but one star permanently in the heavens, which is therefor called *má'i bisó'*, coyote's star.

VEGETABLE LIFE.—The sacred mountains had been given their positions by First Man when he invited the various Peoples to contribute to the completion and beauty of the earth. Accordingly, the various animals planted the seeds of trees, shrubs, plants and grasses, which they had brought with them from the lower worlds. Thereupon, First Man breathed upon them so that they, too, might see and live. The clouds, winds and thunder were placed on the sky (*yádlqil*) so that moisture might be supplied and vegetation secured.

THE BEARERS OF THE SUN AND MOON

When First Man had made all things for the earth and sky, and given them stability, he selected the Gourd children, of

whom mention was made above, to carry the sun and the moon. These he placed on their left shoulders, leaving their right hand free to enable them to eat when traveling. Thirty-two trails (*bitqín*) were assigned to the sun (*johona'af*) for his daily travels. To compensate themselves both the sun and the moon (carriers) stipulated one human life for every journey (*nalyéhe*, pay).

First Man also placed pillars in the east, south, west, north and center of the earth (*bitsís lagai*, etc., white, blue, etc., body or pillar). And raising the sky (*yádlqil*) he placed it as a cover over the earth, resting it on the five pillars (*nlyă nizíni* and *yăya nizíni*, what is below the earth and sky, pillars of the earth and sky.)

He then blew the sun (and moon) beyond the ocean (horizon). And breathing over the earth (and sky) he caused them to expand (about eight inches in diameter). And breathing (*bílyöl*, blew) the dawn (*hayolkhál*) toward the east the sun rose (*qayá*) there; wherefore, the dawn is always seen in the east. Since the earth was small, however, the heat of the sun at its zenith became unbearable. After four unsuccessful trials the present dimensions of the earth and the distance of the sun were retained.

THE SEX OF THE PEOPLES

The various Peoples (*dină'ě'*) of the lower worlds are considered male and female. The sun and moon are both male, as also the sky (*yádlqil hastqín*, the Sky Man). The earth is feminine (*nihosdzán esdzá*, the Earth Woman). The earth (*nihosdzán*) may also be considered as mother of all, inasmuch as all *dină'ě'* proceeded from it and planted the various seeds there. The Earth Woman (*nihosdzán esdzá*), however, as wife of the Sky Man (*yádlqil hastqín*), is located in *níhodotl'ish*, the blue world.

Sex is also assigned to the dawn, *hayolkhál hastqín* and *hayolkhál esdzá*, the Dawn Man and Woman (east); also to the southern blue (azure), *náhodæt'lish hastqín* and *náhodæt'lish esdzá*, the Azure Man and Woman (south); and to the twilight, *náhotsoi*

hastqín and náhotsoi esdzá, (evening) Twilight Man and Woman (west); and to darkness, chahaqéł hastqín and chahaqéł esdzá, Darkness Man and Woman (north).

THE CHANGING WOMAN

The goddess esdzânádle, the Changing Woman, is held in universal esteem by the Navaho. She is not tainted with crime, though by mistake this is done in some legends.

hayolkhał hastqín, the Dawn Man, and chahaqéł esdzán, the Darkness Woman, gave birth to a daughter, which was found and carried home by First Man. When the girl was of fair growth she was found to be very beautiful and of good sense. And when her foster parents called to her in jest: "esdzânádlehé," she readily answered the call with: "yă? what?" She was therefor called esdzânádle, (who is become a woman, or changed into a woman), the woman (changed).

At the age of nubility a ceremony was performed for her, and her nuptials with the sun were then celebrated. (This ceremony of nubility is to-day celebrated with such alterations as were decided upon on that occasion.) Exclusively hozhóji (of benediction) songs were used and the songs of other chants barred. (The vigil, or do-igházh, which must accompany every ceremony in use by the Navaho, consists of prayers and songs of benediction, hozhóji.)

The society of First Man was ever a burden to her, so that soon after this ceremony she left him and traveled to the west. Here the holy people of the cardinal points (Dawn Man and Woman, etc.) had prepared a house for her, which in every respect was like to that of the sun in the east. And when she visited the various compartments in the east, south, west and north, she reappeared dressed in the colors of these directions. And returning again from the eastern compartment she reappeared dressed in yolgai (white shell), wherefore she is also called yolgai esdzán, or the white shell woman. As the wife of the

sun, then, the white shell woman is also called esdzânádle esdzá, esdzânádle woman, and the sun, her husband, jōhona'af hastqín, the Sun Man, by whom she has two children, a boy and a girl.

THE CREATION OF MAN

The creation of the various nahokhā dinǎ'ě', or the people on the earth, is attributed to esdzânádle, and took place at her dwelling in the west. The Navaho gentes (dinǎ'ě', clans) were created from parts of her body. With the skin which she removed from her breast she formed the khīya'āni clan; from the skin of her back, the honaghá'ni clan; and removing a particle of skin from below her right arm she made the tqodichīni clan; and from below her left arm the tqótsoni clan. To each of these particles of skin she added some of the skin taken from her hands, making of each the image of a man, and quickening it by chanting. And when they spoke they spoke the language of esdzânádle. The animals, such as horses, burros, sheep and cows, which she made for them, were not given to the Navaho.

She also created the khis'āni, Pueblo, the Mexicans, and the Americans, as also their domestic animals, but dispatched them all across the oceans—for when they spoke they had a different language.

She was extremely kind to her children, promised them variegated corn, seeds and plants of all kinds, medicines in case of sickness, precious stones (ntl'ís), and her protection in general. Therefor, all good things, the mild rains, the growth of the corn, etc., all are due to her beneficent influence, and come from the west. Finally, she presented each with a pet (lī), a bear (shǎsh), wildcat (nashdūi), bullsnake (tl'istso), and porcupine (dasán), for their journey to their present habitat.

They arrived on the summit of dookoshíd, San Francisco Mountains, accompanied by hashchēltqīi and hashchē hoghan, genii, who deprived them of the valued treasures given them by esdzânádle. They made the first sacrifice of ntl'ís, precious

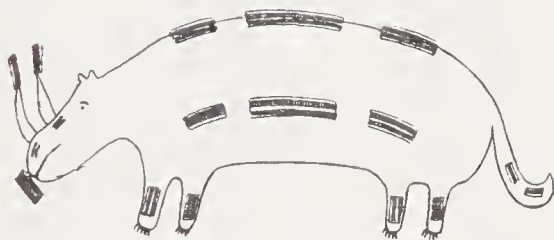
stones, on that summit. They then continued their journey, visited the various sacred places, and affiliated new members to their tribe, until finally they lived in perfect harmony with the *khis'áni*, Pueblo. The traces of this early history are to be found in the numerous ruins of the Navaho country.

THE MAN-EATERS OR MONSTERS

The manner in which the sun and moon-bearers carry out their threat of taking a human life on every journey of theirs is shown by the introduction of *diné' daiyáni*, man-eating monsters. Similar monsters are said to exist in the Pueblo legends, since they flourished when both tribes were united.

yeitso, the big *yeyi*, was the son of the Sun (*johona'af biyé'*).

He slew his victims with various knives (*beshe*) which he thrust at them.



Horned Monster—(Delgyed)

delgyéd, the young (*biyázhe*) of *tqéholtsōdi*, the water monster, is described as a plump but fleet quadruped having two horns on its snout.

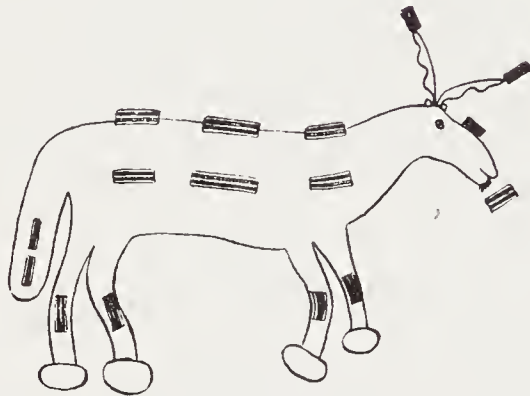
tsé nahalé, the monster crane, which dwelt on the cliffs of *tsebidā'i*, the winged rock, or Shiprock, was made by the sun from a white eagle (*t'ájilgai*) and white thunder (*ī'nī jilgai*).

tsénaghái, the wandering stone, was an offspring of one of the *tqéholtsodi*, water monsters of the lower world. The three last mentioned monsters were the pets (*bilf*) of the sun, who lowered them, together with his son (*yeitso*), on the summit of *tsōdzil*,

Mount Taylor. yeitso made this his abode, while the others sought another vantage ground.

jōsh dīqāshi, the pricking vagina, was formed by the sun and moon out of the marrow of human bones. She is the parent of the following monsters, giving birth to them by coition with various animate and inanimate objects:

tsédahidzītqāli, or the one who kicks from the cliff, and yeitso labāi, the grayish giant, she conceived by tsēnastqāni, a heap of stones.



Water Horse

binā yeaghāni, who killed by (the charm of) their eyes, she conceived of sōtso dīqil, the big dark star.

bijōsh yeda'a', the overwhelming vagina, who crushed their victims with this organ, she conceived of qosh nāōlāli, cane cactus.

tse aqāndil, or the cliffs which bound together (crushing), she bore by combined tsenastqāni and tseāwhōzi dīqil, dark boulders.

shash naalkhāi, the pursuing (tracking) bear, was her offspring by the mountain.

In a similar manner she brings forth:

jādi nakhidzāda, the twelve antelopes, by plants.

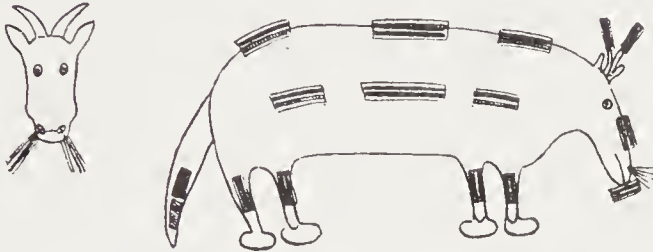
lūkā digīshi, the slicing reeds, by lūkā, reeds.

tséyĩ' donahũntĩ', the impassable crevice, by tsedokâl, fire-clay (?).

saitãd, the rising (whirlwind) sand, by natšlĩd, rainbow.

Finally, tĩsh dońt'fhi, the impassable snake.

As the names imply, most of these monsters pursued their victims to death, all, however, were bent on the destruction of mankind to gratify the sun and moon.



Water Ox.

In addition, many evils are personified, as:

dichĩn hastqĩn, hunger, starvation.

tqæ'i'hastqĩn, or tqæ'æ'f', poverty.

yãhastqĩn, or yã'lgaf hastqĩn, lousiness, filthiness; (some mention tqãlawhũsh hastqĩn, cleanliness, as a necessity).

sã', old age, decrepitude; bĩl, sleepiness, drowsiness.

yéitso łabá', the big gray god, and ásã nayéhe, the beet-beetle.

tqéholtsödi, a water ox; tqéłf, a water horse.

The monsters usually figure in witchcraft, and are *native* enemies in distinction from foreign or human enemies. Hence, the special blackening mentioned elsewhere (hochóji jĩntěsh).

THE SLAYERS OF THE ENEMIES OR MONSTERS

The mother of the Slayers of Enemies is the child of yádĩqĩl hastqĩn and nahosdzãn esdzã, the Sky and Earth. The nubile ceremony was not performed over her. She was impregnated, however, by the adulterous Sun, and also conceives of the trickling water of a fall. She gave birth to two children, the child

of the Sun being called *nāyēnezghāni*, the Slayer of the Giants (monsters), while the other answered the name of *tqobajishchfni*, the Child of the Water. When they discover their descent in early youth the children journey to the sun in order to enlist the aid of their father in ridding the earth of its monsters. Though the petition includes his own offspring the sun grants it, even to the extent of personally killing his son *yeitso*. In turn, *nāyēnezghāni* slays all the monsters and thus obtains his name.

Both divinities occur in many of the legends and the corresponding rites, hence, *łitso nádlehe*, turned yellow, and *łeyāneyāni*, reared under the ground, are probably another name for them. The sand-paintings designated by the four names, *nāyēnezghāni*, *tqobajishchfni*, *łitsonádlehe* and *łeyāneyāni*, differ only in color. *nāyēnezghāni*, the Slayer of Monsters, is also invoked as *nīhune-yāni*, reared in the earth, or *ayayā'neyāni*, reared under the ground, or *néidigíshi*, the one who cuts. The Water child is also invoked as *áltsowenádlehe*, he who renews everything, and *tsowenádlehe*, he who is versed in all things.

THE WOMAN WHO BECOMES A BEAR

esdzá shásh nádle is the woman who subsequently changes into a bear. *atēd diyíni*, the holy girl previously referred to, and described as the mother of the bearers of the sun and moon, is again introduced as *jikhé naazíli*, the tingling maiden, or the maiden who makes a noise. Her brothers, twelve in number, are great hunters. Eventually she marries the coyote, who in turn is slain by some of the neighbors. The coyote had taught her how she might change her form into that of a bear, and in this disguise she slays her brothers with the exception of the youngest who, at the inspiration of *esdzânádle*, slays her. The members of her body, which he scatters in the four directions, are changed into bears of various kinds.

THE FLOOD

A flood (*tqónahűeskhai*, or *tqónāhoskhai*), destroying all the animals and inhabitants of the earth, is attributed to the sun.

The Slayer of the Monsters and his brother again journey to the sun in quest of riches which their father had promised. He grants them on condition that they slay all the inhabitants of the earth for him, which condition they finally agree to. The sun then causes it to hail and rain for twelve days and nights, so that the waters covered the highest peaks. The Holy People (*diyín dinǎ'ě*), however, had hurriedly carried many of the inhabitants of the earth to a place of safety, and their descendants now people the earth. The waters were removed by the heat of the sun, but the traces of that flood are yet visible throughout the Navaho country.

THE CHANTS

The origin of Navaho chants (*dahatqál*) is more or less a subject of conjecture and uncertainty, though the native theory is by no means favorable to their foreign origin. But leaving the question of origin aside, the subject of Navaho chants is, we believe, sufficiently intricate and varied to be of absorbing interest to the lover of folklore, as it is practically virgin soil, offering unlimited possibilities. Wonderful results have indeed been achieved by such eminent students as Dr W Matthews, U. S. A., and A M Stephen, whose published and unpublished works have been of valued assistance. Yet a glance at the subjoined list of chants should suggest that comparatively little has as yet been achieved by way of offering a comprehensive study of Navaho mythology which, in reality, forms the basis and ritual for the chants, since the origin and motive of each chant is based upon its own peculiar legend. And it must be a cause for regret that very few of the singers now living in the tribe are conversant with the chant legends and, as a matter of record, are very indifferent to acquire such information. In consequence, many of the chants are becoming extinct, and the singers conversant with legends, songs and prayers are fast disappearing without a possibility of filling such vacancies. It is also well established

that much *singing and exercising* is continuously practiced by a class of inferior and ignorant apprentices, whom the Navaho designate as *azā onłigi*, who offer a mouthful, implying that they make a few prayersticks accompanied by a song or two. Then, too, much of this material is subject for dispute, especially among that set of singers who fabricate legends to suit their own pretensions. Hence, the extinction of the existing and more difficult chants is conceded as inevitable by the remnant of conservative and studious members of the chant lodges, for want of proper pupils. Efforts are consequently being made to obtain a complete account of the various legends with a view of supplementing those already existing, such as the night and mountain chants, by Dr Matthews.

The various chants may properly be divided into such as do not deal directly with the *yei*, or Gods, and such as originated with and from the Gods.

Among the first class, or earlier chants, the *hanełnãhe*, or moving upward, forms the basis for the others, as its beginning is with the lower worlds, continuing with the emergence from them up to the time of the creation and dispersion of the *yei*. The order of the chants would be about as follows:

The *hanełnãhe*, or moving upward, a chant which in its various forms is still largely in demand. It is often designated as the *hochłji*, or ceremony for dispelling witchcraft.

The *anłji*, or chant for dispelling foreign enemies, more popularly known as *ndā*, the war dance.

The *yei hastqłnikě*, the rite of the godmen, which was extensively in demand on raids and in war, though at present rarely in use.

The *nayẽhe*, or rite for dispelling monsters. This is also referred to as *hochłji jintěsh*, the blackening against witches or native enemies, in distinction to *anłji jintěsh*, or the blackening against foreign enemies, as the Utes, Comanches, Americans, and the like. The two are war dances, though the *anłji* is ordinarily meant when speaking of a war dance. As both are

branches of the hanełnéhe, and the monsters or nayēhe figure largely in this rite, the designation, hochóji jintésh, as implying native enemies, is not far-fetched.

The hozhóji, or renewal, and rite of benediction, is essential to every Navaho chant. Accordingly, the nine night ceremonies set one night aside for this blessing, which is referred to as the doigházh, or vigil, while the five and one night ceremonies subsequently require a special set of hozhóji songs for their completion. Outside of its connection with the chants it appears as a one night ceremony of blessing upon the hogan, the members of the family, their chattel and real estate, their crops and occupations, such as weaving and singing, their propensities to greed, at the nubile ceremony, or the birth of a child, the dedication of a new set of masks, for the purification of the ceremonial paraphernalia, in fact, for almost any phase of domestic life.

The naťóye bakháji, a rite for dispelling the darts of the males, such as lightning, reptiles, and the like.

The tsáha, or awl chant, which is not in vogue.*

The nlóæ, or hail chant, is also extinct.

The sôtsóji, or big star chant, is still in vogue.

The diné bínłchłji, or Navaho wind chant, is much in use. The winds are personified and injurious.

The má'iji, or coyote chant, is disappearing. The ajłhi, or rite for the removal of mania and prostitution, which is part of it, is still in vogue.

The atsósiji, or feather chant, is sometimes in demand. The requisites, however, in the shape of numerous baskets, buckskins, and the like treasures, as well as the great amount of labor entailed in the preparation of numerous prayersticks, do not add to its popularity.

The tqóæ, or water chant, is not mentioned frequently.

The nidzfji, or corral rite, for corralling antelope and deer, was largely in use at the chase at large, which has subsided at present.

*A M Stephen gives an interesting account of the manufacture of the first moccasin. Presumably this is the origin of the awl chant.

The *na'tóye ba'áji*, or female branch of the lightning chant, is still in vogue.

The *atsá aq'f'níl*, or *yóæ*, or rite for trapping eagle, the eagle or bead chant, is also in demand.

The other chants, which begin after those just mentioned (or rather after the emergence), are usually designated as *diy'ínkëgo oqót'íd*, the happenings of the Holy Ones, as they relate largely to the *yei*, or Gods. These are:

The *dzil'kíji jikhæ shásh nádle (át'igi hatqál)*, the branch mountain chant of the maiden becoming a bear, (the mountain chant of Dr Matthews). This, with the *hozhónæ*, the chant of beauty, (relating the metamorphoses of the bear and copperhead [*t'listso*], by which they inveigle two beautiful maidens into marriage with them), are designated as *aq'éhodit'igi hatqál*, or chants of the same (legendary) branch which finally meet again.

The *t'éji (qát'igi)*, the night chant branch, or *yéibichai*.

The *akhéshgān qát'igi*, the branch of the claw dance.

The *khási*, or feather-shaft chant, which is often designated as *béshe*, or knife chant, or *ináji*, life chant.

The *dzil'kíji na'tóye (qát'í)*, the (branch) of the mountain chant of those sending forth darts.

The *yóæ* of *tsédez'ă*, the bead or eagle chant of the rock promontory. This is the bead chant partly described in the *Legends* of Dr Matthews, while the *yóæ*, or bead chant mentioned above, begins with the monster eagle of Shiprock (*tsebidái*).

The *lájf sîn*, or one day song, which is so called from the legend in which a person is slain by a bear and revived in one day. This is extinct.

In addition to these, the *wolach'ji*, or red ant chant, the *hash-chétsohi (hastšætsohi)*, or big god chant, and *chíshi bín'chíji*, or Chiricahua-Apache wind chants, are much in vogue. The latter is often designated as the *whôts'ji*, or *whots'æji*, or *whots'æe bín'chíji*, the tooth-gum wind chant, or by its Apache name, *golaghái*.

In addition to the three branches mentioned for the *naťóye*, or the lightning chant, the mountain chant, too, has several variants. Ordinarily the *dziłkíji bakháji*, or male mountain chant, is meant when speaking of the mountain chant as such. There exists, also, a *dziłkíji ba'áji*, or female mountain chant, and another variant designated as *ayázhiji*, or the mountain chant to the small birds.

Divination, as preparatory to various chants, is also practiced in one form or other. Divination by sight (*dest'i*), or star reading (*sôtsóji*), consults the stars and such animals whose sight is very marked, as that of the turkey (*tqázbi*), or magpie (*á'á'i*). Divination by touch (*ndílníji hatqál*) consults the breeze and winds (*nłchíji*), or animals such as the Gila monster (*tqínlai*). Divination by hearing (*ístsá*) consults the winds and such animals whose sense of hearing is highly developed, as that of the wolf (*má'itso*), or felines in general (*níshdúi*).

Of the chants in existence, some are conducted for nine nights, others for five, and a few for one night only. Thus, the night chant (*tléji*), the mountain chants (*dziłkíji*), the wind chant (*diné bínłchíji*), the coyote chant (*má'iji*, or *ajłi*), the feather chant (*atsósiji*), the water chant (*tqóæ*), the big god chant (*hashchétsobi*), and the lightning chants (*naťóye*), are nine night (*naast'ai tlei*) ceremonies.

The bead or eagle chant (*yóæ*, *yóiji*), and the *nłchíji*, wind chants, and rites of divination, as the big star (*sôtsóji* and *ndílníji*, by touch), as well as the prostitutes' chant (*ajłi*, or *má'iji*), are also conducted for five nights (*ashdlá tlei*), while the witchcraft chant (*hochóji*, or *hanelnéhe*) is now always conducted for five nights only, though formerly nine nights were required. Similarly, the red ant chant (*wolachiji*), and the beauty chant (*hozhónæ*), are five night ceremonies.

The *hozhóji*, or blessing, is now a one night ceremony, though originally of four nights' duration. The knife or feather-shaft chant (*béshe*, or *khási*), and the Chiricahua wind chant (*chłshi bínłchíji*), too, are of one night's duration.

The list, while fairly comprehensive, may possibly be increased by some extinct chants, such as the *níji*, or earth chant, and others.

THE WAR DANCE

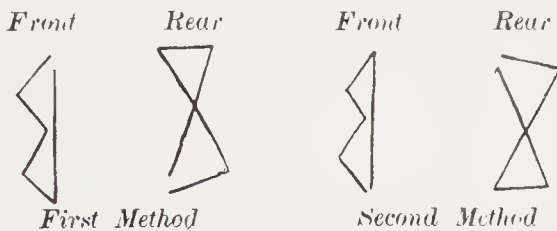
The so-called war dance, extensively in vogue with the Navaho to-day, originated with the mother of the Slayer of Monsters (*nāyénezghāni*) and the Child of Water (*tqobajishchíni*). For, it is said, when they had slain the monster *yeitso*, they carried his scalp as a trophy and hung it on a tree previous to reporting to their mother. While relating to her of the encounter with the monster they swooned and lay unconscious, whereupon, it is said, their mother prepared a concoction from herbs struck by lightning, sprinkled them with it, and shot a spruce and pine arrow over their bodies, thus reviving them.

Accordingly, to-day this ceremony is conducted in cases of swooning, or weakness and indisposition attributed to the sight of blood, or of a violent death of man or beast, especially if this has occurred to a pregnant woman, or even to a husband or father during the period of her pregnancy. While no special season seems to be prescribed, the ceremony is most frequently conducted in the summer and fall of the year. The singers performing it are known as the *anáji*, enemy, or war singers, as in addition to this ceremony they were also in possession of all the rites prescribed for the warpath and raids.

The special features of the war dance are the carrying of the rattlestick, the dance of the Navaho girls, and the blackening of the patient.

The rattle consists of a juniper stick about a yard long, or the length of a cord held at arm's length from the tip of the left hand to the right nipple. This stick is held upright in the left hand the fist resting on the knee, while with the finger-nail of the right thumb incisions are made in zigzag form to represent a bow. As custom varies, some of the old people supervising this

function insist that the opening of the bow, or the end where the bowstring is slipped over the notch, be made at the upper right hand corner, while others require the opening in the opposite, or lower right hand corner. Similarly, the incision made on the rear of the stick, to represent the queue, varies with the opening made for the bow. Such as make the opening of the bow in the upper right hand corner make that of the queue in the lower left hand corner, while the opening in the lower right hand corner of the bow requires a similar opening in the upper left hand corner of the queue. These figures illustrate the two prevailing methods.



This done the singer applies a mixture of animal tissue to the stick and blackens it with the ashes of burnt weeds. He then places a bundle of weeds at the point of the stick, together with a yellow tail feather of a turkey. He crosses the base of the bundle with two eagle feathers, and adds a buckskin thong previously spliced in four and knotted with the small toes of deer, to dangle at its side. The whole is then wrapped and secured to the stick with sacred buckskin. Neighbors and friends then trim the stick with hair-cords, which at present take the form of vari-colored calico bands. These are tied to the stick between the bundle of weeds and the grip, in which manner it is carried forth by the patient to a place usually some ten and more miles distant, where the cere-

mony is continued. In some instances the scalp of a slain American, Mexican, Ute or Comanche is substituted for the bundle of weeds, though at present such scalps are in possession of very few persons.

WORDS

aghálsīn, the rattlestick; dīlkīs, or gād, juniper.

abé dóbił kídésnī, stretched (with a cord) from the nipple.

kídīnshnī (nt'á), I stretch my arm out.

bił kídīnshnī (nt'á), I measure with my arm.

dalałji biłkídésnī, one arm's length.

daālchīshji biłkídésnī, the length of both arms stretched out.

anáji hatqāli, a singer of the war rites.

anáji, or anáji ndá, the war dance. The ceremony is referred to by other expressions which occur later on.

hastqúi, or nahastqúi, the elders or old people whose customs are observed in the ceremony.

haláshgān be bikīnī'f'nīl, or biķēēshchī, marks with finger-nail.

achídó, or achīji ałtqīn bikīsétqā, in front the bow is placed.

atsáji tsīyēl bikīsá'ā, in the rear the queue is placed.

aqénā'ā, the outlines of the bow or queue; chōhót'ī', the opening of either: dēgo chōhót'ī', the opening is on top; yāgo chōhót'ī', the opening is at the lower end, as the case may be with either bow or queue.

aghāl biķīnī'nshnīl (biķīnī'nnīl, biķīndeshnīl), I mark the rattle.

aghāl yishtlā (sēltlā, deshtlā), I grease the rattle.

tłā nashchīn béstlā, it is greased with mixed tissues. This is a mixture of tallow of the deer (bī'), antelope (jádi), bighorn (debétsétqā), the mountain lion (nishdūitso), the wolf (māitso), the otter (tqábāstqīn), and the buffalo (ayáni). aghāl yistlā, the rattle, is (then) greased.

aghāl nanát'ēsh, it is then blackened.

aghāl yisht'ēsh (shét'ēzh, desht'ish), I blacken the rattle.

altqādedlīd be, with burnt mixed weeds or their ashes. The

herbs used are tsildilyísi (chıldilyísi), dodgeweed; tl'ö' nastqási, grama grass; tseëzhí' (cheëzhí'), a sagebrush (wormwood), and tqũikhál, wormwood sagebrush.

aghál qadishlé (qadishlá, qadideshkl), I prepare the rattle, namely, add the weeds, feathers, tassels, etc.

aghál (tsildilyísi) bínishtl'ö (binéltl'ö, bidíneshtl'öl), I tie the weeds to the stick. The same weeds as above are used for this purpose.

tqázhi bitsé kisdítsoi, a turkey's yellow tail feather.

atsá bitsé, the eagle tail feathers.

bádasēñil, the tassel, or that which dangles on its side. This is usually called akhēshgān, the small toes of a deer (bî'behēshgān), as these are used in making the four knots in the spliced buckskin (abāni). Weeds, feather and tassel are then wrapped and wound with saered buckskin (dokakéi bil bikídesdiz).

tsīt'lól bil'itqá, it is carried with the hair-cords, which are tied to the shaft of the rattle.

bā'ndā (or bandāi) yotqfl, the patient (or he over whom we sing) carries it.

aghál ānshtqf (āntqâ, adeshtqfl), or aghál nshtqf (ntqâ, deshtqfl), I carry the rattlestick.

ítqî, or dijî ítqî, they carry it to-day, that is, it will pass in the neighborhood to-day. The first day of the ceremony is therefor called aditqf (ajitqf), he carries it (himself), it is carried away.

THE GIRLS' DANCE

The carrying of the rattlestick from one locality to another is always participated in by a throng of interested visitors, and usually proceeds in a frantic rush. Arriving at its destination the hair-cords are removed from the shaft and distributed among the residents of that locality, who anxiously apply for them, and frequently weave them into saddle blankets and small rugs.

Toward evening an ordinary cooking pot is converted into a drum by throwing a few pebbles into it and covering the top with a piece of goat- or buckskin, which is secured around the rim with a cord or thong. This improvised drum is continuously beaten with a small stick while the maidens select a partner from the throng of visitors to dance with. Married women are excluded from this dance, though it is permissible to select a partner from among the married men. Frequently young men pay for the exclusive privilege of dancing with a sweetheart or favorite on each of the three nights.

The dancers perform in a circle, though no special order is prescribed. Each maiden, standing behind her partner, grasps his side and completes a circle or two with him, reversing the circle occasionally to avoid dizziness. As all participants hum and sing while in action the whole ceremony has been popularly designated by this feature, or as the *ndá*, or *ajindá*, they all hum moving, the war dance, or rather the girls' dance (*squaw dance*). After completing these motions several times the girl releases her partner and, unless otherwise stipulated, charges a fee of five to twenty-five cents for the privilege granted, or an equal amount for the privilege of being released. The dance is continued until about midnight when the party disperses to retire.

On the following morning the rattle is again carried to some other distant place and is borne, not by the patient, but by one acquainted with the prayers required for its final deposit, who, thereafter, takes charge of the rattle until the close of the ceremony. In the evening of this day the *ndá*, or girls' dance, is repeated as on the preceding night, and is in turn followed on the third morning by the bearing of the rattle to the place selected for the close of the ceremony. Here the patient is blackened about noon.

WORDS

itqá (*bitlé*), the night after it has been carried, designates the first night of the ceremony.

īchōshi dajīlzhīzh, turning they dance; bāhastqīn ādini, having no husbands, or unmarried girls.

nizhnædā, we danced last night; nizhnædā, we have had the ndā, or the close of it was last night; nizhdīnodā, there will be a ndā, or dance, to-night, etc.

ndā, the girls' dance, the war dance; ajindā, they all sing moving; nīdā' (nīdā' nt'æ), we all sang moving, we had a dance.

qūējīchōsh, or bejīchōsh, she turns him, that is, he is her partner, she selects him. Similarly, shæ'æchōsh, I am her partner, she selects me; ænāchōsh (ænāzhchōsh, ædochōsh), he is her partner, or shænāchōsh (shænāzhchōsh, shædochōsh), I am her partner.

bi'īshzhīzh (bi'āshzhīzh, bi'īdeshzhīzh), I dance with him or her.

ænāshchōsh (æshāchōsh, ædeshchōsh), I turn (dance with) him.

ba'itqī, it is carried for him; ba'itqāi, he who carries the rattle for the patient, the rattle bearer.

ndizā (pr. ndīzé, fut. ndīdozél), they moved (on the morning of the second day), the second day of the ceremony.

bichīshnjē, they are toward it (toward the final place), the second night.

nanzá (pr. nazé, fut. ndozél), they moved, the third day, or the bijī, and last day of the ceremony.

jīnt'esh (jinesht'esh, jidīnot'ish), he is blackened, or dijī (aīnææ'āgo) zhīnt'esh, to-day the blackening takes place (at noon).

THE BLACKENING OF THE PATIENT

At noon of the third day the body of the patient is painted black. Juniper branchlets (gād ni'ēhi), with yarrow (hazailtsēi), meadow rue (tqāzhilchīn) and pine needles (nīshchī bī'īl) are previously pulverized, then thrown into a bowl of water, and stirred. One of the assistants now takes a dab of this mixture between his fingers and applies it in turn against the soles, the knees, legs, chest, back, shoulders, mouth and head of the patient, who then sips of the mixture before bathing his whole body with it. Thereupon, the assistant chews some pennyroyal (t'ō' nīchīn) and

foxtail grass (hazaildā'i), and holding his hands to the sun sputters the liquid over them. He then proceeds to press the body of the patient, who is seated, turning it first one way, then another, and repeating this four times. This done his body is rubbed with sheep tallow and the usual mixture of animal tissues, after which the ashes of the above mentioned burnt weeds are spread over the entire body, while the patient's face is painted red with a mixture of red clay and grease, with stripes of black drawn across the cheeks and the entire chin. He is now made to step, or rather rest his feet, in dirt dug up by a gopher, which is held in a blanket before him, putting first his left then the right foot into it. The charm, consisting of a tail feather of the roadrunner wrapped with eagle down feathers, is now tied to his hair. Wristlets, too, made of braided leaves of slender yucca (tsāzi tsōs), are tied to his wrists, while buckskin saddlebags, studded with white beads (which are purchased from the Utes), serve as shoulder-bands, crossing each shoulder to the hips. Finally, the bill of a crow is secured to the palm of the right hand, and is used in scratching the head, since the fingers are not to be used in this manner. The patient remains rigged in these trimmings throughout the afternoon and evening, and partakes of a plain gruel (gād ādin), after previously saluting the sun by *inhaling the sun's breath*, that is, accompanying inhalation with a gesture toward the sun.

As usual, the day and ceremony is closed with the dance of the girls, after which the singer removes the trimmings from the patient, as also that of the rattle, instructing the bearer of it to securely deposit the shaft. This he does amid prayer, and a secluded crevice or ledge of rock is selected for deposition.

WORDS

jint'esh, he is blackened, the blackening.

dijf zhint'esh, on this day he is blackened.

ba'ndāi nesht'esh (nāt'esh, dīnot'ish), the patient is painted black; nsht'esh (nesht'esh, dinésht'ish), I paint him black.

gäd ni'éli, etc., yitsqéd tqasákhágo, the herbs are crushed and the meal mixed with water.

chil q'ájilē (qâ'ájilā, qâ'azhdolīl), the herbs are prepared (from qâ'āshlē, etc.)

tāātē adajītlō, he rubs his body.

tāātē adíshtlō (adsístlē, adidéshtlō), I rub my body.

hazeildá'i tlō' nłchīn aibił jā'ālī benáhoznzól, he sputters chewed grass and pennyroyal.

benásiznîzól (benásiznâesöl, benásizdînosöl), I sputter it over something.

debé baká' tlanashchín bił beēzhdíltlā, sheep tallow mixed with animal greases are rubbed in (he is rubbed with them).

behodíltlā (behodístlā, behódíldoltlā), he is rubbed in (with grease); beshidíltlā (besidístlā, beshídíldoltlā), I am rubbed in with.

beéshtlā (beséltlā, beédéshtlā), I rub him in.

nishtlā (niséltlā, ndéshtlā), I rub you in.

chī tlā bił, red clay with grease.

naāzīsi bilēsh, gopher's dirt (taken from a gopher hill).

nshtlāji, left; nshnāji (khě), the right (foot).

bī'ndsít's, he steps in (with right and left foot).

bīnāst'ēs (bīnāst'ēs, bī'ndést's), I make a step, place my foot into something.

anāji éltlō, the charm of the war rite.

natśédlōzi bitsé, the tail feather of a roadrunner.

bitsōsi, down feathers (of an eagle).

látsini, wristlets (tsāzī tsōs yishbīzh, braided yucca leaves).

gāghâha'āshjē, shoulder-bands (made of abāni, buckskin, or Ute saddle pockets).

beēdichídi, the scratching implement; (gāge bidé, crow's bill).

johona'af bizhf' jizhfīzh, he inhales the sun's breath.

johona'af bizhf' yishfīzh (yízhīzh [bizhfīzhīzh], bizhf' deshīsh), I draw the sun's breath inwardly.

aghāłtsīn nnāzhntqā, the shaft is deposited.

aghāłtsīn nnānshtqf (nnāntqā, nnādeshtqf), I deposit the shaft.

dině yæhóziní bihnízhdl'tégo nnäjtqî, a person well acquainted with the requirements deposits it.

tséyāji nna'ä'nîl, they put them below rocks.

ADDENDA

In addition to the above it was learned that the war dance is conducted for dispelling foreign enemies only, whether they be real or imaginary. If, accordingly, in fancy one is pursued by foreigners, such as Americans, Comanches, Utes, Pueblo, Cliff-dwellers, or others, and is indisposed on this account, he calls upon the war singers to destroy these enemies. This accounts, too, for the custom of coveting a tuft of hair, a piece of a legging, a whole or the part of a scalp, a piece of bone or clothing belonging to an Apache, Ute, or other foreigner, or purchasing them when seen at a curio store. When these objects are in possession of a friend no time and labor is spared to acquire portions of them if desired for immediate use. A journey of this kind is termed *going on the warpath* (dæbā, I went, or ajībā, he is on the warpath), and the parts of the enemy required, or designated as desirable for the rattlestick, are usually indicated by the astrologers and diviners called upon previously to trace the source of illness. If successfully obtained the bone, hair, rag, or other trophy, is tied to the horse's tail to avoid contamination, and is hurried without delay to its destination. Otherwise, too, such trophies are held at some distance from one's person while in transportation, being tied to a stick and placed at some distance from the camp, while at home they are hidden in some distant hide-spot for future use. This is a remnant of an old war custom whereby the moist scalp (tsízis dītlé) was carried in a similar manner, and contamination, or rather pursuit, by the spirit of the slain, avoided by means of the blackening (jintésh), or war dance, held soon after a skirmish. The medicine pouch (jīsh) of the war singers were, therefor, frequently provided with such trophies as hair, finger-nails and finger-tips

of slain enemies, called *aná bokúntĩ'*, or the collar-bone of the enemy, for the purpose of conducting their war rites (*yei hastqínikě*).

At present the trophy is inserted with the bundle of weeds, and on the final day of the ceremony, when the blackening of the patient has taken place, they are carried out some distance from the place of final gathering and deposited upon the ground by the singer. The throng surrounds the trophy at a respectful distance, while the singer takes a pinch of ashes and sprinkles the trophy with it (*lēshchī iyī'nīl*), exhorting the visitors not to gaze upon it while this is being done. When the patient, too, has sprinkled ashes upon it two of the visitors rush up and discharge their guns (formerly their arrows) upon the trophy. They then sing the praises of the patient in slaying or *running the enemy down*. This is concluded in the evening, just before dark; by a general celebration of victory. The rattle bearer, and other invited singers of the war rite, indulge for about half an hour in yelling and rushing at each other with firebrands, a turn which is soon taken up by all men and boys present. The rest of the night is spent in dancing and merriment.

The blackening (*jintěsh*) is sometimes performed independently of the other features of the war dance, and may be done in the open, or in the hogan, or even in a modern house.

For dispelling native enemies, such as the influence of the monsters of the legends, and innumerable witches, another war dance, the *hochóji jintěsh*, blackening against witchcraft, is conducted.

In the description of the masks mention has been made of the bow and queue as emblematic of the clothes of the Slayer of Monsters and his brother. For similar traditional reasons the openings of the bow and queue are left open on the rattlestick. As the Slayer of Monsters or Enemies and his brother, the Water child, are inseparable in the destruction of enemies, the



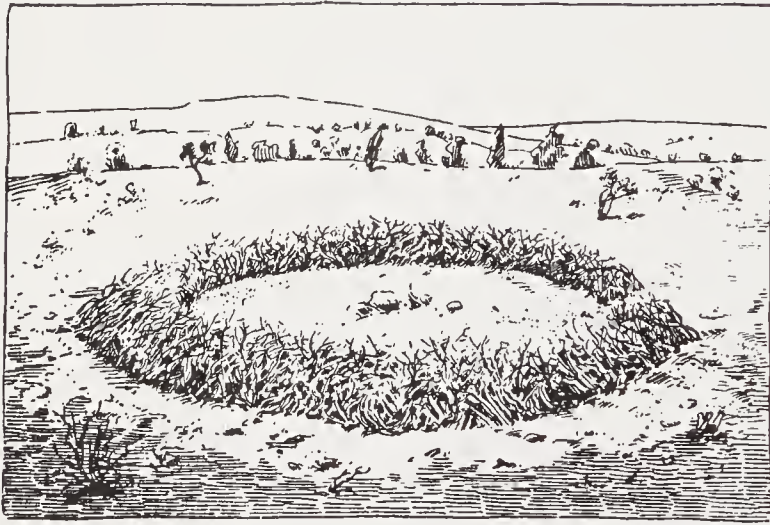
Torch

symbol of bow and queue are both added to the rattlestick as indicating the power of these two gods.

PUBLIC EXHIBITIONS OR DANCES

The night chant, and some of the mountain chants, occasionally close with a public exhibition by masked personators, which, however, is not essential to the chant but optional with the patient. When the night chant is to be closed privately, or like any ordinary chant, the masked personators perform inside the hogan, and the mountain chant is limited, in a similar event, to five nights, with the exclusion of drum and dancers.

In public, the personators perform in a corral, and for the mountain chant, around a huge fire built in the center of this



corral, which accounts for the popular names of the corral and fire dances for these two chants. These corrals or enclosures are made of brushwork, set up after sunset, which, in the mountain chant, is done under the direction of the masked personator of hashchéltqii, the Speaking God, who gives his directions by gestures and his usual call only. The corral is of the same shape

for every public exhibition, and has but one opening in the east, though at dawn the enclosure is broken at the other cardinal points also.

The personators for the night chant disrobe to the breechclout and moccasins, paint their bodies with white clay, and adorn themselves with a silver belt, and the skin of a kit-fox dangling in their rear. Each dons one of the masks, after which they are not allowed to speak, and enter the corral in single file, in which position they dance to the beat of a drum. They leave the corral after some time and make way for another set of dancers to whom they give their masks and regalia. This is continued until dawn is announced, after which the corral is opened.

In the mountain chant the personators, such as the two performing the feat of swallowing the arrows, and the fire dancers, are not masked, but disrobe, and paint their bodies for protection from the excessive heat. A variety of legerdemain was in vogue at this dance, such as the growing of yucca, the dancing porcupine quill, and other performances, which took up the intervals. Originally, custom required the messengers, or meal sprinklers, to invite foreign tribes to contribute with their magic for the occasion. Later these invitations extended only to the shamans of the tribe whose insignia, when they had such, were borne to the place of celebration by the messenger. Eventually, much of this formality was dropped, as performances of magic are exposed to the ridicule of the younger generation, so that invitations to the various *lodges* of medicine men are extended merely as a matter of courtesy. The various performances, however, are responsible for such designations of the mountain chant as the fire dance, growing hashkán, or hashkán dance, etc., just as the night chant is sometimes designated as the yeibichai dance from the leading personator.

Ordinarily, a ceremony is performed over a single patient. It is permissible, however, to conduct a ceremony for two patients of the same sex, so that, for instance, a ceremony may not be held over man and wife simultaneously. A singer may

conduct a ceremony over his own wife, but not for his own benefit, for which he must call on the services of another singer. In the event of two patients there are two meal or pollen sprinklers at the public exhibition in place of the customary single one. Other changes take place in the various songs, and especially in the distribution of the prayersticks. (See Prayersticks).

The night chant is performed over persons as well as over the masks themselves. An instance of this kind has been mentioned in the dedication of a new set of masks. Another instance is the purification of a set of masks defiled by the death of its owner, or that of the patient for whom the chant is conducted. In this event the masks may not be used again unless the night chant, specifically its *vigil*, has been performed over them.

It is customary that guests attending the close of a ceremony partake of a repast at the hogan where it takes place. At public exhibitions, where the multitude of visiting guests is unusually large, this has been abolished, and is now limited to the meals which the patient must provide for the singer and his assistants. At the smaller ceremonies of one and five nights' duration meals are served to the guests about midnight. Accordingly, the meal served there is sometimes referred to as the close of a ceremony.

WORDS

naākhaí, they appear; or yei nakhaí, the yei appear; or diné daálzhízh, the people dance; or yéibichaí, the yeibichai dance; or tléji, the night chant. The latter refers to all the ceremonies, while the former expressions have reference only to the public exhibition and indicate that it will take place.

ilnáshjín (ilnáshjīnji), the corral, or corral dance, is also used for any exhibition of a public character.

alfl, magic or legerdemain. The swallowing of the arrows, sprouting of the yucca, dancing feather or quill, are referred to as alfl.

azhnīdā, they go around (the fire), the fire dance.

dzīlkījī, the mountain chant.

atsāle, the personators. Usually the four leading dancers at the yeibichai bear this name, though it is also applied to others.

tqó nenīli, the water sprinkler, or clown at the fire dance.

bikēhatqáli, he over whom they sing, the patient.

nakhi bikehatqáli, two patients, who are usually indicated by the term, aqídiāsh, they go together.

do-īghāzh, the vigil.

hozhógo náhodlel, they (the masks) should be purified or restored again.

yáhada'ilyé (yáhada' isyá', or yáhada' iyá', yáhadadiyolyé), the meal (or feast) is prepared.

yahada'íkhā (yáhada' ískhā, yáhadadiyokhál), it is poured out. The implied meaning is one's intention of attending the close of the ceremony.

hatqálgi da'ilyé (nt'æ), the ceremonial repast (at the close of the ceremony).

bijí, it's day, the closing night of a ceremony.

bijígo deshál, I will attend the ceremony.

The Choice or Selection of Chants to be Performed

The decision as to the particular chant to be selected is left with the individual. Owing to the great variety of causes for disease and continued misfortune the choice is often a difficult one. If relief is not obtained the rites and ceremonies of another chant should be enlisted to secure it. In this manner a fortune is often spent. Public opinion has it that a person bitten by a snake, struck by lightning, thrown from or kicked by a horse, is pursued by some unseen power. The bite of an ant, or mad coyote, continued prostitution, or venereal excess, loss of sheep, failure of crops, sickness or death in the family or relationship, all portend some malign influence. This is also the case with dreams bearing on misfortune. A pregnant woman

especially must exercise the greatest care lest she observe anything in the shape of violence. The influence of bad dreams must be removed during the time of her pregnancy, both by herself and her husband. If this has been neglected the duty devolves upon the child, even at an advanced age.

In such manner each case is carefully diagnosed and discussed by the family and their relatives who, in addition, often consult astrologers and diviners for the purpose of selecting the appropriate chant.

THE EXPENSES

Expenses vary according to the nature of the chant and aggregate for public exhibitions as high as two hundred dollars and more. For the minor chants the price consists of a horse, cow, some sheep, calico, etc., according to the means of the patient. The legends inculcate that the shaman render his services without compensation in case of need. A nominal price is sometimes asked in such instances, though frequently assistance is refused entirely. Friends and relatives of the patient are, as a rule, asked to assist in defraying expenses.

THE CEREMONIAL HOGAN

Ordinarily the chant is conducted in the hogan of the patient.

Should the hogan prove too small and inconvenient for the proper conducting of the ceremony, as in the mountain or night chant, a more spacious hogan is erected. This is completed before the arrival of the shaman. A ceremony of dedication of the hogan does not take place, though the head of the family, or some other person, may sprinkle the four poles at the cardinal points with pollen. Upon the completion of the ceremony the hogan may be used for domestic purposes.

The *tqáchē*, or sudatory, is also a feature of some chants.

hoghán álya, the ordinary expression for the completed hogan, is also used to designate that the hogan is in readiness for the

shaman. Locally they are designated as *medicine lodges* by the whites. (See Navaho Houses).

THE CHANTER OR SHAMAN

The term *hatqáli*, chanter, implies that the bearer of this title is conversant with one or more of the chants, its prescriptions, songs and requisites. He is a recognized authority on the requisite ceremonial herbs, earths, paintings, prayersticks, etc., and should be in possession of everything necessary for conducting the chant. Persons of an especially retentive memory and natural alertness are selected as pupils by an elderly shaman. In some instances he imparts his knowledge to his son, brother or relative, provided they show some inclination for attentive study, as many years of patient application and rehearsal are required for the necessary proficiency. The pupil is ordinarily bound to repay his preceptor with the fees obtained from the first four chants after his apprenticeship.

The chanter is not obliged to answer every call for his services, but is at liberty to refuse. The legends point out that a messenger was dispatched to the home of the chanter whose services were required. He placed a gift before the singer, who in turn passed it from his left foot upward over his forehead, replacing the gift on his right foot. He then held it to his mouth, inhaling its breath, after which he appointed a special day as that of his arrival. The messenger then carried the pouch (*jîsh*) of the chanter to the home of the patient, announcing the day of his arrival, which was usually set at four days. At present the messenger offers the compensation, simply stating that the services of the chanter are sought. The chanter may then refuse, but ordinarily accepts upon learning the cause of the disease and the condition of the patient, and sets the time of arrival at four days. The chanter usually carries the pouch (*jîsh*) personally, though the practice of dispatching it by the messenger is also observed.

As a rule women do not perform as chanters, though some are known to have done so. Many women are well versed in the medicinal flora of the country and are often consulted.

The shaman is not always in possession of the complete paraphernalia required in some chants. These are then borrowed for the occasion, and a similar courtesy is returned if possible. The patient must furnish the eatables free of charge to the shaman, as also such calicoes and other incidentals as may be required in the course of the chant and do not belong to the *jish*. These incidentals which, in the hashchétsohi (Big God chant), for instance, are very numerous, become property of the chanter, in addition to the compensation previously stipulated.

While the influence of the chanter is felt it has very little, if any, bearing on the government of the tribe as such. Apparently, their influence is due to their greater or lesser authority on a given chant. Very few of the existing headmen are chosen from the ranks of the *chanters*.

THE POUCH OF THE CHANTER

The *jish*, or pouch, of the chanter contains all the requisites for a given chant. With the exception of the hozhóji rite, each chant requires a specific *jish*, containing the necessary paraphernalia for conducting the chant according to traditional ritual. The term is then applied to the complete paraphernalia which is always carried in a pouch (*jish*). This is an oblong sack made of dokākéi, sacred buckskin, with thongs made of the same material to secure it. The contents of the pouch consist of feathers, rattles, stones, pollens, animal tissues, native herbs, ochres



and clays, and additional paraphernalia for specific chants, some of which are difficult to acquire. The lightning chant, for instance, requires two cane reeds (lúkātso) with tassels (bizól), one taken from Taos (tqówhól), the other from the west (Oraibi). Others require arrow-points (bes'ěst'úgi) which have been disinterred by a badger or gopher. Some call for the generative organs of the buffalo, the scrotum, etc.; others for arrow-points upon which a bear has urinated, or at least trodden. A collection of this kind is therefor made only after years of patient labor and research, and is in consequence scrupulously safeguarded. When the shaman has disposed of his pouch before death its contents are sold by the heirs, either in part or whole, as the profit may warrant.

jīsh, the medicine pouch.

jīsh be bik'idesdizi, the wrap for the pouch.

THE HOLY ONES

The meaning of the word hashchě (Holy Ones) as employed in the names of some of the gods is not generally known. Moreover, it is not generally made public by the knowing ones who guard its meaning as a secret.

hashchěltqī, the Talking God of the east, is the child of hayolkhál hastqín and hayolkhál esdzá, of the Dawn Man and Woman. hashcliěbā'ād, of the south, is the child of náhodætliš hastqín and náhodætliš esdzá, of the Skyblue Man and Woman. hashcliěhoghăn and hadachíshi, of the west, the children of náhotsoi hastqín and náhotsoi esdzá, of the Evening Twilight Man and Woman. chahałqěl hastqín and chahałqěl esdzá, the Darkness Man and Woman brought forth anł'áni, the Corn-beetle, and tqádídí, Corn-pollen. The spirit of life (ńłchī') having been breathed into them, the Corn-beetle (anł'áni) was charged to give speech or voice (bēiná) to the others. When they attempted to speak, however, hashchěltqī could utter only "wnuhú;" hashcliěhoghăn and hadachíshi uttered "qawó,

qawó;” hashchěbakhâ similarly, and hashchěbă’ăd, “wu, wu.” And when it was found that they could not speak, it was said of them, “chěhasdzī, it (the child) did not speak, or attempted (unsuccessfully) to speak.” By an approximate anastrophe, chěhasdzī became hachě, or hashchě, the root dzī being dropped completely. Accordingly, hashchě designates the *speechless or mute one* in the sense given. It is here rendered with *gods, genii, holy ones*, or some such equivalent.

When these speechless divinities were leaving for the holy places they made the imprint (nikée) of their faces upon yolgai, white shell, dotl’izhi, turquoise, and other precious stones. At present these imprints are represented by the masks.

THE MASKS

The night chant properly requires twenty-four masked personators, though in late years this number has been limited to fourteen; the yeibichai, six male and six female masks, with tqóněnilī, or water sprinkler. The masks are designated as jish, pouch, though strictly speaking they are nikée, or face-prints of the Holy Ones (diyīni). The latter expression is now used to designate the mask of yucca which is placed on the patient. The masks used by the *dancers* are made of dokākei, or unwounded buckskin, and are colored and decorated anew for each occasion.

The following is a list of the personators:

hashchěltqī’, or the Talking or the Directing God, so called from his usual role of director or master of ceremonies. He is also referred to as yéibichai, the grandfather of the yei, or gods. The night chant is called accordingly, the *yeibichai dance*.

hashchěhoghăn, the House God.

hashchěbakhă’, or the Male God, of which there are six.

hashchěbă’ăd, or the Female God, of which there are six.

tqóněnilī, or the Water Sprinkler, who is also called hashchělbă’i, the Grayish God.

dzāhadolzhái, or zāhadolzhái, the Fringed Mouth.

ghá'āsKidi, the Hunchback.

hashchēshzhíni, the Black God, or Firegod.

nāyénezghāni, the Slayer of the Enemy, and

tqóbajishchíni, his brother, or the Child of Water.

hashchēolt'óhi, the God who Shoots (the arrows).

hādachíshi, the Lashing God, who lashes or whips.

hashchēlchfi, the Red God.

hashchē idíłtsōs, the Whistling God.

The mountain chant requires but one masked personator, representing hashchēłtqīi, who directs the construction of the corral by his cry, "wuuhú," and by gestures.

The Big God chant also requires two masked personators of hashchētso, the large hashchē, and bowhoāqínāsgai, or the one with the double row of white teeth.

The coyote chant (mā'iji) requires hashchēłtqīi and zahadolzhá (dzāhadolzhā), the Fringed Mouth. (See *infra*.)

These chants are designated as yei dahulóni, or having the yei, while the others are spoken of as yei adin, or without the yei, or masked personators.

The masked personator imitates the cry of the gods, for instance, "wuuhú," of hashchēłtqīi, etc. The shaman always enjoins upon the masqueraders not to speak when wearing the mask. The reason for this injunction is apparent from the above explanation. It is also feared that the offending masquerader should inevitably be visited by some misfortune. To insure against such an event custom requires that the masquerader blow upon the mask after removing it. For a similar reason it was prohibited that maimed and lame persons wear the masks, in fact, only persons of perfect physique and health were admitted. A greater leniency, however, is gradually taking the place of this ancient rigor notwithstanding the futile protests on the part of the better and more conservative class of shamans.

THE DEDICATION AND DRESSING OF THE MASKS.

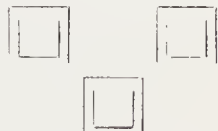
The masks being a likeness and representation of the gods are sacred, and the preparation of them is, therefor, minutely prescribed by ritual. They should not be made in the home as one would make an ordinary article of commerce, but require a ceremony in progress for their construction. The commercial buckskin is not admissible as material for the mask. The hide of a deer, shot with an arrow or bullet, is equally rejected, as it is essential that the animal be run down and lassoed, after which pollen is placed upon its tongue and it is strangled to death. (do-kākēi, the hide and other parts of an unwounded deer, sacred buckskin.) The places for incision are marked off with pollen through which a light mark is drawn with rock crystal (tságha-díndíni) and the incision made with a stone or ordinary knife. The sinews, hide, pollen used in tracing the lines, the excretions of the eye, the toes, and such parts as may serve one or other ceremonial purpose, are preserved as sacred.

The rear of the neck of the deer is used for the front or face of the mask. (Some hold that a doe skin is necessary for the female masks, though others do not make this distinction.) This piece is fitted to the face of the patient, the proper size being obtained by placing both hands on it with the thumbs and index fingers touching each other. The circle thus made along the extremities of the hands and fingers is cut out after previously tracing the mark with rock crystal and pollen. The remnants of the hide cut out are made into thongs and fringed strips for decorating and tying the masks. The back of the mask is fitted and cut out in the same manner, so that masks covering the whole head are composed of two halves one of which only is required for the face masks, as, for instance, that of the female gods.

The two parts are sewed together with do-kākēi bitsíd, sinew of the unwounded deer. The sewing is done sunwise (shábi-kěgo), as with the patient seated facing east, the mask is made to face

that direction, so that the stitching begins at the south end, terminating the seam across the head at the north end or side. The stitches are made with an awl, from right to left, making an ordinary winding stitch. To obtain the proper shape it is fitted from time to time over the head of the patient, which is done with all masks of a set, as the entire set must be constructed and dedicated simultaneously. Accordingly, a number of sewers are employed so that the sewing may be completed on that night. (If one night is not sufficient to complete the sewing, coloring and dedicating, the set is carried to two and more ceremonies for completion.) Feathers of the bluebird (dóli) and yellowbird (ayásiltsoi) are inserted between the two sections along the seam, all tips or growing parts (nosél) of the feathers extending the same way, or upward. To facilitate sewing, and to preserve the leather moist and pliable, hide and sinew are occasionally sprinkled with sacred water (tqó alchín, smelling water), which is used for no other purpose, and is at present difficult to obtain. Some spring, the bubbling of which seemed mysterious, or rain water collected into a hole on the summit of a fairly inaccessible rock, or similar water holes, were termed holy or *smelling water*, and set aside for the above purpose. At the construction of a new set of masks the singer usually dispatched two of the fleetest couriers in opposite directions with instructions to bring such water by sundown of that day.

The sewing completed, the masks are in turn slipped over the head of patient, and the eyes and mouth of the mask are then marked and cut out in the usual manner (with pollen and rock crystal). The eyes on most masks are oblong and triangular, with the base of the triangles facing each other. On some masks, as that of the Slayer of Monsters, and that of the Water child, the eyes are square, while the eyes and mouth of the Talking God (hashchéltqi) are double squares laid against each other (biná and bizé aqísēnil) with one end of each cube left open. The greater number omit the nose, which is painted on the few requiring it.



The mask is then colored with blue (adishtl'fsh), black (lejfn), yellow (lētsoi), red (chi') or white clay (dlēsh), as the ritual may require.

hashcl'ēltqi, the Talking God, is white, with a corn-plant extending from his mouth to forehead.

hashcl'ēhoghān, the House God, is blue.

hashcl'ēbakhā, the Male God, and hashcl'ēba'ād, the Female God, each six in number, are painted blue. The female mask is a face mask and is tied to the rear of the head.

hashcl'ēshzhīni, the Firegod, is black.

hashcl'ēlchī, the Red God, is red. This, too, is a face mask.

ghā'āskidi, the Hunchback, and nā'āskidi, the Huncheye, use the same mask of a blue color.

hadac'l'fshi, the Lashing God, also requires a blue mask.

nāyēnezghāni, the Slayer of Monsters, requires a black mask, while his brother, tqobajishchīni, the Water child, calls for a red mask.

hashcl'ēlbāi, the Gray God, or the tqónēnīli, Water Sprinkler, who is usually the clown of the set, is decorated in blue.

zāhadōlzhāha, the Fringed Mouth, is colored in blue and red, as the right half of his mask is colored red for the branch of the night chant called *to the rocks* (tsenfji), whereas yellow is substituted for red in that branch chant known as *to the water* (tqahtl'f'ji). Two masks, therefor, belong to the set for this god, though the yellow and blue mask is disappearing altogether.

The base of each mask is decorated with a colored line of yellow and white representing the dawn (hayōlkhāl) and evening twilight (nāhotsoi).

Such gods and masks as make use of hair employ drizzling rain (nhtsānājīn) for this purpose, which is indicated along the top and sides of the respective masks. Horsehair (hīghā), or more definitely, horsetail hair (hī bitsēghā), mixed with a tuft of sheep wool (debé baghā), is at present substituted for the drizzling rain.

The painting done, the masks are lined up for dedication. As

the vigil takes place on the sixth day (fifth night) of the night chant the masks, too, must be dedicated then. This is termed *tqo akĩltqā*, sprinkling of water, and is performed by two boys and two girls, of the age of ten and twelve years, who have not attained the age of puberty. Each of these carries a feather (*nditqí*, *ndĩ'á*), which they dip into water and sprinkle each mask with it. They then feed each mask with a pinch of steamed corn gruel (*neshjĩzhi*) previously prepared. This is followed by a general feast of those present at which they partake of bread-stuffs, corncake and sweets, provided, however, that some bee-weed (*wā'*) is obtainable from which to prepare a tea. Whenever this weed is not to be had the feast is omitted, though in any event the feeding of the masks must take place. The masks then smoke (*jish bádihiyā*), that is, the singer prepares a smoke for them from mountain tobacco (*na'to wā'i* and *dził nāt'ō*), which he blows up and downward four times, following this by blowing the smoke toward each mask. The vigil (*do-ighāzh*) is then continued and is followed by a sacrifice to the talking stone (*tseyál-tqiji*) of a prayerstick the length of the hand, while a similar sacrifice is made for the patient to the shelves in the rock (*tseinĩtqi*). However, when the dedication of the masks can not be completed in one night, the unfinished masks are again exhibited at the night chant on some other occasion, which is repeated until the dedication has been properly completed.

At the public exhibition at the close of the ceremony the new set is used for the first time. (See Flagellation.)

A single white feather (*tsōs łagai*), or a tail feather of the eagle (*atsōstso*), adorns the side or center of the mask, which feathers are more numerous on the masks of the Talking and House Gods. The base, and sometimes the tip of this live feather, is additionally adorned with tufts of owl (*nāshjāghā*), yellowbird (*tsĩdiltsoi*) or turkey feathers (*tqāzhitsōs*). At times the center of this tuft is decorated with a turquoise, but more frequently with white clay (*dlēsh*), which is subsequently removed and used medicinally (*dlēsh zā'nĩł*).

Whereas the two *bilnîhodidezlî*, who originated with the world, namely, the kit- and yellow fox (*mâ'i dotlîsh* and *mâ'i litsoi*), are numbered with the holy people, their furs are employed as collars and decorations for the neck. A pair of each is used for some masks, as that of the Firegod, of the Slayers, Hunchback, and Fringed Mouth, the heads of the furs being crossed in front with the tails dangling in the rear. Some masks, as the Talking and House Gods, the Male God, and Water Sprinkler or Clown, substitute spruce twigs for the fox fur, while the Female Gods, the Whipping God, and the Red God, employ no decoration about the neck. The collars are known as *mâ'i-litsoi ilbâ*, yellow fox collar, *mâ'i dotlîshi ilbâ*, kit-fox collar, and *chîô' ilbâ*, spruce collar. The female masks are decorated at the base with fringed rain (*nltsánajîn*), or horsehair.

The mask of the Hunchback (*ghá'ăskîdi*) is decorated with a basket the bottom of which has been cut out. The bottom of the basket thus cut is decorated with zigzag lightning (*atsîn tîsh*), while two horns (*dē*), similarly decorated with lightning and downy feathers, extend from the interior in opposite directions with pieces of red stone (*tsełchîi*) lined around the rim of the basket. The horns represent ornamental headpieces of cannelcoal (*bâshzhîni*), which at present, however, are made of twisted sheep- or buckskin and colored with blue (*adishtlîsh*), black (*łejîn*), and white clay (*dlēsh*). The basket, which in the home of the gods is made of cannelcoal, now consists of an ordinary native basket cut out for the purpose, and belongs, like the masks, to the medicine bag (*jîsh*) of the shaman. The whole is placed over the mask as a hat or covering (*tqăăstqân*, put on the forehead), and is removed after every performance. Similarly, his hunch, or pack, as it is called (*qēł, biyăł*), is made anew for each occasion. This, to-day, consists of a stuffed sheep-pelt decorated in white, red and blue, or the color of the rainbow (*natslîid*, with white, *dsăgai*), which it represents. Five white (*atsēlgai*) and five red (*atsēlchî*) eagle tail feathers are inserted into the pack, which is secured to the back by means of cords

representing sunrays (shābitlōl). He supports himself on a cane (gish) and seeks attention by his mournful sighs of īyahān.

The decoration of zāhadolzhāha, the Fringed Mouth, is similarly constructed of a bottomless basket, but in place of the horns of the preceding mask a large triangular feather (tqāātsōsi, forehead feather) of horsehair (līghā) is substituted, and topped with three eagle feathers (atsōs lagai) wound with tassels of grass (tlozōl be bikidesdizi). Five red feathers (atsélchī) extend from the basket. This mask is provided with ears (bijā) and ear cords (jātlōl). To distinguish the masks for the two branches of the night chant, as mentioned above, one is designated as tsenfji zāhadolzhāha binf lichī, the Fringed Mouth with the red face for them in the rocks, the other, tqaltlā'ji zāhaholzhāha binf litso, the Fringed Mouth with the yellow face for them in the water.

Since the masks represent the gods who supposedly visit the corral dancing with the personators there, the likeness should be perfect, and the personator should, in some degree at least, personify the god, carrying such emblems of power about his person as are known to be the possession of the god. Hence, the personator carries these or is decorated with them, as, for instance, the drill in the case of the Firegod, or the lashes in case of the Whipping God (hadackīshi). Presumably, too, the color of the mask indicates the material of which it was made, such as turquoise for blue, white shell for white, and so on. In some instances the figures on the face of the mask are emblematic of the god's power, or of his peculiarity. Thus, the lightning on the face of the Slayer of Monsters illustrates his vocation, while his garment is a covering of bows (altqīn yehadit'égo sezígo, he is clothed in a bow). The personator also carries a black stone knife (beshdīqíl) and a rattle (baghál) of piñon (destsfn). The mask of the Water child is decorated with many queues to indicate the manner of tying the hair (or the scalp. See War Dance). His body is clothed in queues (tsiyél yehadit'égo sezígo), while his knife is made of blue flint (besh dotl'izhi bibézh)

and his rattle (*bagháł*) of juniper (*gäd*). Both queue and bow are left open lest the operator lose his eyesight (*chöhot'ĩ* *do-aqıdzöda*, the line of the outlet is not drawn together). Other masks require similar additional paraphernalia, which are added to the mask when actually in use. And, whereas, the gods remove these masks upon returning to their homes, the decorations of furs, feathers, spruce or drawings are in every instance removed from the mask before being replaced into the pouch. As much time, labor and expense is required in the construction of a new set of masks the old ones are preserved as much as possible, and few of the living singers of the tribe are conversant with the required ritual prescriptions for their manufacture.

These masks usually figure in the night chant unless the public exhibition is to be omitted. In the mountain chant the various groups of dancers perform masked or unmasked in a free for all exhibition. The feather chant (*atsösiji*) requires the Talking God (*hashchéłtqii*) and the Water Sprinkler (*tqónenfli*), the latter carrying a large olla on his back. They dance within the hogan. The Talking God insists upon a corncake (*alkhád*), which must be baked for him and his companion before he commences to dance.

In the coyote dance, which is now extinct, three personators of Talking God (*yéibichai*), the Fringed Mouth (*záhadolzháha*), and a Female God (*yeiba'ad*) appeared. It is said that the Fringed Mouth danced carrying a live kit-fox (*mâ'i dotlízhi*) in his hands. This was done inside the hogan.

Finally, at the *najéhego hatqál*, or a singing (of the night chant), the close of which is conducted inside the hogan instead of in public, the Whipping and Red Gods (*hadachfshi* and *hash-cléłchf*) appear in the hogan making liberal use of their lashes. The full set of masks, elaborately decorated, and differing to a great extent from those used in public, is employed then. Drawings of these could not be published here.

IMITATIONS OF THE NAVAHO MASKS.

Owing to the elaborate ritual connected with the construction of the masks and their dedication very few sets are extant. These are, therefore, disposed of only with extreme reluctance, though the courtesy of their use is readily granted to a friendly shaman. For purposes of barter, and also for prestige, imitations of the genuine masks are made of other than *ceremonial* hide. The genuine mask, however, is, for obvious reasons, preferred and sought in the public performances.

Imitations of the Navaho masks are used by the Zuñi in the Shalako dance. These are made of horsehide, the mouthpieces or tubes being fitted and lengthened to further greater convenience in uttering the usual cries. The Navaho designate the Shalako as "yéinaes," the tall yei or gods. They are, moreover, freely permitted to assist in the songs, which are identical with those of the Navaho ceremonies. Indeed, it has been established that the better known ceremonies of the Navaho are reproduced on the night of the Shalako, thus the dziłkíji (mountain), tl'éji (night), yóæ (bead), hozhónæ (beauty), etc. While the Navaho language is used the accent and difference in cadence of the Zuñi rendition does not efface the peculiarly Navaho origin of the chants. The yéinaes, or tall giants, who perform as dancers throughout the night have been changed or added to suit the Zuñi. The uninterrupted recitation of the songs of the various Navaho chants, which is done simultaneously in several houses, is also distinctly Zuñian. The fact that a month or so after the Shalako has been held, the do-ighāzh, or vigil, must be performed for the efficacy of the Shalako, seems again to favor its Navaho origin. In the opinion of some who have witnessed the Shalako, and from inquiries made, it appears that the Shalako originated some seventy years ago, and that the ilnáshjīn (corral dance, or night chant), which the Zuñi occasionally perform with imitations of Navaho masks, is of more recent date, namely, after

the return from Fort Sumner. The opinion that the Zuñi learned and borrowed from Navaho teachers is quite general.

While the Navaho are permitted to attend some of the ceremonies of the neighboring Pueblo, this is particularly true in regard to the Jemez tribe, whose shamans at times are invited to hold ceremonies over Navaho patients.

THE SACRIFICE

The essential feature of most chants is the sacrifice (*biyáel*), which is offered to the divinities. The sacrifice consists of precious stones (q. v. *infra*), which are offered singly or in connection with the prayerstick and the tobacco. When ritual requires that the sacrificial stone be perforated (*alghádētqāl*), as with that for the Porcupine, it is fastened through this perforation to the prayerstick, otherwise it is placed upon the latter and tied. The sacrifice, like the prayerstick, is not identical at every chant, and the prescriptions governing both, with reference to kind and the manner and place of deposit, are very numerous.

The tobacco (*nát'ō'*) which forms part of many sacrifices ordinarily consists of wild tobacco (*dzil nát'ō'*). This is crumpled in the hands (*dīnogīsh*) and placed in the hollow internode of reed (*lúkā āqādīt'án*), the bottom of which is previously closed with feathers of small birds (*āyāzh*), such as the bluebird (*dóli*) and yellowbird (*tsídiltsoi*). It is then sealed with a layer of pollen, which is inserted with an owl feather, then symbolically lighted with rock crystal (*tsághadīndīni*) and deposited near the usual habitat of the divinity. In dedicating the offering the singer invokes the divinity by its sacred name (see *Sacred Names of Animals*). The names of the various tobaccos often indicate to whom they are offered.

debé nát'ō', bighorn tobacco (*Oxytropis*), is offered to the Bighorn at the night chant; *dlú'i nát'ō'*, ermine or weasel tobacco, is offered there to the Ermine.

dinǎ'ě' nát'ō', or *diné huneshlgo binát'ō'*, tobacco for alarmed

persons, which is also called *jádi náťō'*, antelope tobacco (*Lygodesmia rostrata*), is offered to the Antelope at the corral chant (*nīdzfji*).

The bead chant tobacco (*yóijī náťō'*) consists of *dzīl náťō'* *tšōs*, catchfly; *shāsh náťō'*, bear tobacco (*Tribulus maximus*); *náťō' wā'ī*, (*Psoralea tenuiflora*); *tīsh náťō'*, snake tobacco, and *atsá náťō'*, eagle tobacco (*Gilia longiflora*).

The *ajīlē dīhīlyé'*, or smoke for lewdness, which is performed at the coyote chant (*má'iji*), consists of the following: *náťō' nīchīn*, (*Custilleya minor*); *debé náťō'*, *jádi náťō'*, *tīsh náťō'*, *dlú'ī náťō'*, *atsá náťō'*, mentioned previously; *bī' náťō'*, deer tobacco; *debé kú hāchīn*, the seed with the odor of the bighorn; *ájā' kú hāchīn*, the seed with the odor of the ear; *dzīkhēlchīn*, odor of youth; *jīkhēlchīn*, odor of maidenhood; *dínás* and *dínás-tso* (?); *debé haichīdi*, scratching for the bighorn; *tłō'dé nayízi*, (*Amaranthus albus*); *qōsh bēldēhi*, groundsel; *tsēdīdē*, four-o'clock; *khīltsōitso*, (*Bigelovia albicaulis*); *hazāāl'é' tso* (?); *biłna-āt'oi*, (*Eriogonum*); *tsiyānlchīn*, pigweed, and *ayán ilāghái* (?). These are crushed with the fingers, thoroughly mixed (*altqā-násdzīd*), and to insure effect, the secretions of the eyes of the elk and bighorn (*dzē* and *debé tsētqā' bināyanlchīn*) must be added. A pipe (*náťōstsē*) is filled with this mixture and lighted with punk made of corncob pith (*dāātsīn*). The pipe is stemless, conical in shape, and provided with a hole in the bottom to draw the smoke. When necessary they are made of clay mixed with crushed broken pottery, though frequently pipes found in old ruins are made to answer. The singer smokes this pipe facing east, and blows the smoke first downward to the earth; then to the sky, in front of himself, to his right, rear and left side, and finally from above downward. This is repeated in turn by the patient and all present.

náťō' nīyēl íshlā, I have made your sacrifice (of tobacco).

dīhishlē, I make a cigarette (sacrifice).

náťōstsē bīdīhishlē, I fill the (ceremonial) pipe with tobacco.

THE PRAYERSTICK

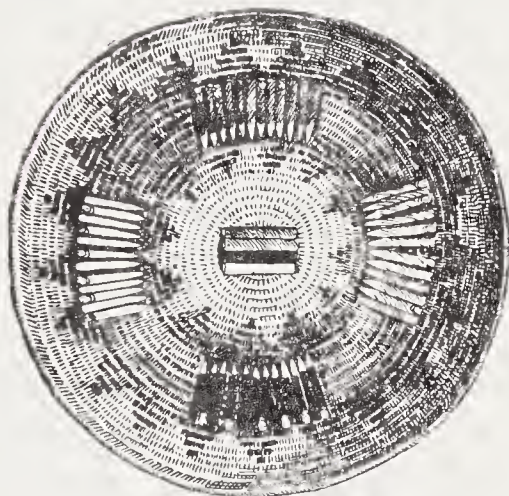
Small sticks, varying in size and color, are offered with the sacrifice and dedicated by prayer, which possibly accounts for the name, *prayerstick*, though the word *ket'án* is not interpreted that way. Some prayersticks are the width or length of three finger-tips (*tqá bikě*), some of four; others are the length of the second joint of the little finger, or the span from the bent index finger to the tip of the thumb, and so on. They are colored dark (*diłqıl*), white, yellow, blue, black, spotted (*lıkhızh*), brown (*dınlzhın*), red mixed with black (*lıchı*), or gray and glossy (*disós*). Some are decorated with rings about the neck, others with zigzag lines on the body of the stick; some with cords of divers colors wound about them in the ritual manner (sunwise), and the reverse (*shadá'ji bikéstqı*); still others require an ornament like the arrow-point (*bés'ěst'ügi*), or something similar. The *ket'án* for the Sun, for instance, is made of cane reed colored blue (*lúkātso dotłış*), that of the Moon of cane reed colored white, that of the bullsnake or copperhead (*tlıstso*) of cane reed colored dark (*lúkātso diłqıl*), while the so-called track snake (*tlıış dōntı*), which encircles many sand paintings, requires none at all.

Very few ceremonies, such as the *hozhóji*, or renewal, and parts of the *hochóji*, or witch chant, etc., do not require the prayerstick, while in others, as in the night, mountain, lightning, and other chants, they are very numerous, and are made anew for each occasion. The material to be used in their preparation is minutely described by ritual and tradition. Thus, the hollow internodes of the reed figure largely when tobacco, pollen and feathers are to be inserted and lighted symbolically, or the prayerstick is made of mountain mahogany (*tséésdāzi*), wild cherry (*mâ'idá*), juniper (*găd*), willow (*kăi*), cherry woods (*dzıdzé*), etc., which are cut in various sizes according to prescription, and usually in pairs of two, one of

which is thicker, and represents the male, while the thinner is at times, though not always, provided with a facet decorated with eyes and mouth to represent the female divinity. These are designated according to the divinity they represent, as the prayerstick of the badger, porcupine, sun, moon, earth or sky, and subsequently placed in some convenient and secluded spot where it may easily be found by the divinity.

When a singer conducts two ceremonies succeeding each other at short intervals, he usually makes a slight change in the order of the prayersticks, substituting one for another, or omitting a less significant one.

Sixteen prayersticks are laid in groups of four each in the ceremonial or sacrificial basket at the night chant, of which four



Sacrificial Basket

are held in the hand by the four *atsále*, or leading and initial dancers, while the remaining twelve represent the offering of the patient. In the event of two patients these twelve are divided between their two baskets giving each basket six prayersticks.

A number of prayersticks are occasionally specified and paid for by some patients, and are consequently not prescribed at every night chant. They number twenty-two (which is doubled

when there are two patients) and are tied together in one roll. From their number they are known as *ket'á láni*, many prayersticks.

ket'ashchín is a sample roll of prayersticks which is kept by some singers to aid in the making of the various prayersticks for the chants, or certain parts of the chants requiring special prayersticks, and tracing the order in which they should follow. Not every singer is possessed of the sample roll as most of them rely upon memory in preparing and ordering them.

ket'án, the prayerstick, or internode of reed. Some suggest *kāt'án*, small arrow; others, *yílake'tán*, the reed joint placed in the hand.

tšā' bená'infigi, the sacrificial basket (in which the prayersticks are grouped).

ket'á láni, many prayersticks.

ket'ashchín, roll of prayersticks, sample roll.

THE SAND PAINTING

Every chant may be said to have its own peculiar sand paintings, or drawings on sand, which represent the divinity or some event in their lives as related in the legends. They are called *ikhá*, the entry, or they (the gods) enter and go. Originally, these drawings were made by the gods themselves upon spreads designated as *naskhá*, a sewing, implying that the effigy was stitched upon some kind of fabric. Of these, five are mentioned: the *naskhá*, or *dilqíl naskhá*, the dark spread; *keëshchí naskhá*, the red spotted spread; *khín dsísgaí naskhá*, the white house spread; *nat'á sís lăgaí*, the white feather belt, and *nat'á naskhá*, the feather spread, the latter two of which were in the form of a belt. These were spread out for the ceremony, after which they were rolled up and carried to their homes by the divinities. To-day the drawing is made upon a layer of clean sand which is carried in blankets into the hogan and spread out there.

The colors are obtained with crushed sandstone, charcoal,

gypsum, etc. (see Colors). The labor entailed is not performed by the shaman but by assistants under his direction. The heads of the figures are pointed to the doorway, or east, from where the gods supposedly enter. Hence, too, the footprints and trails made of colored sand and leading to the head correspond to footprints coming from that direction. The body (*bitsís*) of the figures is usually an oblong square terminating in a loin-cloth (*tlákhāl*), which covers the lower body, and is decorated with such ornaments as the legends require. The dress (*bi'ä* or *behädit'ěi*), of various descriptions, like dark arrow-points, lightnings, etc., is represented in the corresponding colors. When completed the patient leaves his place on the northwest side of the fire, walks around the latter to the south side, steps into the footprints and seats himself upon the drawing facing its head, or the east. Appropriate songs and prayers are then rendered, after which the patient returns to his place in the reversed order. The drawing is then erased and the sand carried out in blankets.

For local afflictions, and as a mark of reverence, many apply the corresponding parts of the figure to the afflicted parts by *inhaling the breath* of the drawing.

An instance of a tabooed sand painting is found in the bead chant and the drawing of the eagles, whose claws are omitted and substituted by *kös ishchín*, cloud effect, whenever the drawing is made during the summer months.

POLLEN

tqädidín, pollen, is chiefly supplied by cornmeal, and is carried in small buckskin pouches. Sacred stones, such as rock crystal, turquoise, and the like, and sometimes animal fetiches, are enclosed with the pollen. The eating of pollen occurs very frequently during the ceremonies. After taking a pinch of it from the pouch one blows toward the smoke-hole, and places the pollen on the tongue and



head. The singer, patient, and all present, starting from east to south, west and north, participate in the order mentioned. Pollen is sprinkled on the masks, the rattles, and other paraphernalia, on the bath, and so on. Pollen is used also outside of a ceremony, and singers sprinkle it upon one another when meeting.

Pollen is also called *ă'nánogăd* (*bándanesgăd*), shaken off, after a live bird has been immersed into it and released.

Sometimes it is also mentioned as *aqădidîn*, pollen, or *tqēl aqădidîn*, flag pollen; *tqo baqădidîn*, water pollen.

Pollen is also gathered from plants and trees. *tqēl bitqădidîn*, flag pollen; *tsîn bitqădidîn*, piñon pollen; *tqădidî dotlîsh*, larkspur; *tqădidî dotlîsh altsîsigi*, harebell; *chîlchîn bitqădidîn*, sumac pollen, etc.

Other preparations may also be regarded as pollen. *yă'nânighăd*, powdered dust from places where the deer, antelope, bighorn, etc., have stood; *bizânastân*, mouth-crust, or hardened spittle of these animals; *binăyănîchîn*, the eye-crust, taken from the crust in their eye-sockets; *azhăzhi nashchîn* (?); *dă' tqô*, dew, taken from plants (*nansé*).

tqôlanashchîn, mixed waters, is used for similar purposes as pollen. Originally, these waters were gathered at *natsîs'ân* (*alchîn*, the product of), Navaho Mountains; *dôkoôsîd*, San Francisco Mountains; *deběntsa*, San Juan Range; *tsîsnajîni*, Pelado Peak; *tsôdzîl*, Mount Taylor; *tqôwhûl*, Taos; *tqôaqædlî'*, river forks in the south, and from waters in the west and north; from *ášhî'*, the salt lakes below *Zuñi*, or rather from the springs at *dziî bâ'ăd*, the female mountain, and *bakhă' dziî*, the male mountain, at the salt lakes. To this was added, *tqaktl'ăhatân*, clay from the bottom of water; *tqădidîn*, pollen; *tqo bitqădidîn*, water pollen, and *tqēl bitqădidîn*, flag pollen.

Placed in jars, this mixture was planted on the east side of the pueblo by the early *khîs'âni*, cliff dwellers, or Pueblo Indians, and may be found there by digging. *tqôlanashchîn*, or water mixed with that of the ocean, and *tqobiyăzh*, the child of water,

taken from the east, is also called *sizáziyæ bitqó*, the water of the *sizázi*, by which name the early cliff dwellers, or Pueblo, designated themselves.

Another version is offered by Dr Matthews' *Legends*, page 223, stating that the mixture consists of spring, snow and hail waters, in addition to water taken from the four cardinal points. This is a wide-spread opinion.

tqo bizhí, the foam of water; *tqobideshchí* (*bit'eshchí*), water ashes, are also used after the manner of pollen. (See *Masks for Sacred Water*.)

THE RATTLE AND DRUM.

As an accompaniment to song many chants require a rattle (*aghál*). Thus, the mountain and witch chants employ a buffalo hide rattle (*ayáni aghál*); the *hozhónæ* (beauty chant) requires the



Hoof Rattle



Gourd Rattle



Hide Rattle

badger hide rattle (*nahashchíd aghál*); the knife chant (*béshe*) a hoof rattle (*akhéshgā aghál*), which is made of hoofs of the deer, antelope, bighorn, etc., while the big star chant (*sôtsoji*) employs both the rawhide and gourd rattles. The night chant, with the various branches of the wind chants, and the water (*tqóæ*), Big God and feather (*atsósiji*) chants, all employ the gourd rattle

(ădĕ aghál). Other chants, with the exception of the blessing (hozhóji), bend and feather shaft (khási) chants, use the rawhide rattle (akhál aghál).

The hide for the rattle is shaped and sewed when moist, and the handle is platted of the same material as the rattle. (For decorations see "Use of Animals in Ceremony" *infra*.) Small pebbles of white shell, turquoise, abalone, cannelcoal and red-white stone are inserted to produce a rattling sound. The gourd rattle is made of a hollow gourd with a stick attached for a handle. It is decorated with figures of the sun, moon, or some constellation.

At the close of some ceremonies, or when the close terminates in public exhibitions from the fifth night until the finish, the rattle is accompanied by the drum. The drum is the basket turned down which is beaten with a drumstick made of plaited yucca (see Basketry). Tradition also mentions the use of a notched stick which was drawn over the basket instead of the present drumstick. The drum is not part of the medicine bag (jīsh) but is furnished by the patient. The bead, witch and star chants, as well as all one night ceremonies, dispense with the use of the drum.

tšā yásĕtqâ (the basket is turned down), the drum; tšā dĕg nīldē, or dĕg sĕtqâ, the basket is thrown up, implying that the ceremony has been abruptly closed. The singer at times resorts to this measure to enforce discipline.

MISCELLANEOUS PARAPHERNALIA

The following is a descriptive list of various paraphernalia which form part of the medicine bag (jīsh) of various chants.

EQUIPMENT OF CHANTS

The term ză'nīl (equipment of chants) literally means that which is put into the mouth, or taken internally, but ordinarily designates all that is required by a given chant in the shape of

medicinal herbs, clays, animal tissues, liniments, feathers, and the like, which the singer carries in the small medicine pouches (azé jīsh). The make-up of this equipment varies with each chant, and as several equipments are at times carried in the same medicine bag (jīsh), the various azé jīsh, or medicine pouches, required for a given chant are usually tied together and marked in some way to better identify them. Collectively they are then known as zá'nīl, or the medical equipment of the chant in which they are to be used.

yóæ zá'nīl, or yóil hatqāl zá'nīl, the equipment of the bead chant. This consists of various tissues of sacred animals, as the bear, deer, antelope, bighorn, mountain lion, wolf, etc., which are dried and mixed, hence, ajé nashchín, mixed lung tissue; ätsó nashchín, mixed tongues; aghás nashchín, dried and mixed tissue of the gullet of these animals; also powdered atsá azē, aster, and atsá azé nashchín, aster mixed with animal tissue; finally, bečšós, or atsázöl, the whistle, to imitate the cry of the eagle and hawk. The whistle identifies the entire equipment.

ínáji, or béshe zá'nīl, equipment of the life or knife chant, contains: azē lichí, red medicine; lé azē, *Eriogonum alatum*; azē hajíni, gromwell; ayán ilaghái, an unidentified herb, which is mixed with jāábáni, bat feathers. To this is added the tsé dinsē, the growing stone.

dziłkíji zá'nīl, the equipment of the mountain chant, may be identified by the bear-claw attached to it, and should contain: tqēł bitqáldin, cat-tail flag pollen; shāshdá, bear food; lichí, red bush; azē lichí, red medicine; má'idá, wild cherry, and others. Another equipment is designated as dziłkíji ashdlá tlē hatqāl zá'nīl, the equipment for the five night mountain chant, which requires nadálgaiká, meal of white corn, in addition to the herbs already mentioned.

nāťóye diyínkěgo hatqāl zá'nīl, the equipment of the arrow shooting chant, may be identified by yō dijóli, an olivella shell, fastened to it, and should contain khětłō, liniment, and utłís.

precious stones. Also, létsoi, brimstone; lējín, coal; t'ēshchí, red clay; ādishtl'ísh, soft turquoise, all of which are required for sand paintings and for coloring numerous prayer-twigs.

hochóji zǎ'nīl, equipment of the witchcraft chant, includes: tl'ō' nłchín, pennyroyal; t'ēshchí, red clay; tqádídīn, corn pollen, shaken from live birds; tsághadíndíni, rock crystal; í'nītēsh, lightning-struck ashes, and numerous others.

má'iji zǎ'nīl, the equipment of the coyote chant, requires má'idá, wild cherry; má'iji azé and má'iji khǎtlō, coyote medicine and liniment, both of which are made of various herbs, and ajái, dried lung tissue of the sheep.

anáji zǎ'nīl, or the yéi hastqínikě zǎ'nīl, the equipment of the war dance, requires ná'óhi, beans; tl'ō' nłchín, pennyroyal; chíl bó'os'ní', herbs gathered near a tree struck by lightning; í'nītēsh, charcoal from lightning-struck tree; hazaıldá, squirrel food, and létsoi, brimstone, t'ēshchí, red clay, and dlēsh, almogen, for spotting the body of the patient.

LINIMENT

The word khǎtlō (liniment) is probably derived from khě átlō, the foot is rubbed, insomuch as, in accordance with the general law of butts and tips, the liniment is first applied to the feet, and then upward to the prominent parts of the patient's body. With the exception of the hozhóji, or rite of blessing, each chant requires a specific liniment which, therefor, forms part of the equipment (zǎ'nīl) of the chant. The dried leaves of the herbs used as liniment are slightly crushed between the fingers, added to a bowl of water and stirred. In accord with the text of given songs the singer then takes a pinch of the liniment between his fingers and rubs the patient's body with it in the following order: the soles, the instep, the shins, the knees, the sides, the abdomen, the chest, the right arm from the shoulder down, the hands, the back, the left shoulder, arm and hand, and the sides, the back, the front and the top of the head. Thereafter, the patient tastes

of it at times, and bathes his entire body with the remnants, commencing and finishing the bath in the same ritual manner. Occasionally such as attend the ceremony apply the liniment to themselves in the same manner as the patient, and in turn bathe their children. The supply is then usually increased by the addition of more water. As a rule, however, the liniment is applied only to the patient.

Some herbs, designated as *khætlö*, may be used indiscriminately at any chant which requires the appearance of the masked personators, *yéi dahulóni*, as at the mountain, night, bead and Big God chants. Others require specific herbs, which are then designated as the *khætlö* of that chant, though frequently, and especially in the progress of the chant, this designation is dropped and the herb is merely referred to as *khætlö*, a liniment.

tléji khætlö, the night chant liniment, consists of *chölcñn*, phlox; *bilhāzhchí'*, thoroughwort; *tqölcñn*, a water plant; *azé ndöt'ézhi*, horsemint; *tqakhásäkhād*, mouse ear; *hastquí tsīyǎel*, prairie clover, and *tsétqǎ' sǎkhádi*, *Tellima tenella*, some of which are used also at other chants mentioned above.

yóæ khætlö, liniment for the bead chant, consists of *tl'ö'dē nayízi*, tumbleweed, which is mixed with *atsá azé*, eagle medicine, and *atsánlchñn*, aster. These are used externally only.

chíshi bínlchíji khætlö, the liniment of the Chiricahua wind chant, requires *tsāghánlchí'*, *Pectis angustifolia*.

hastsétso hatqál khætlö, the liniment for the Big God chant, requires *ǎťǎ tso*, big leaves, and *ǎťǎ tsōs*, slender leaves, two unidentified herbs.

dzílkíji khætlö, liniment for the mountain chant, includes *chí halchñn* (unidentified), and *tsīyǎnlchñn*, or *tsíyǎ tl'ö'déi*, a pigweed.

anáji khætlö, liniment for the war dance, consists of *tsábī*, wild sunflower, in addition to *kī*, sumac, and *dá'tsa*, mistletoe.

MEDICINE

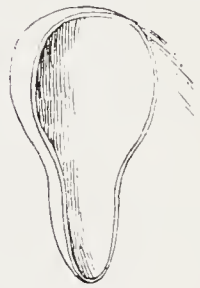
It has already been pointed out that sickness is primarily due to the magic influence of some divine power, and that the chants have been ordained for its removal. Hence, all features of a chant, such as the prayers, prayersticks, baths, wreaths, hoops, and the like, may be considered as integral parts of a remedy, insomuch as some medicines can not be *made* without them. However, as the term *azé* (medicine) is usually not applied in this general way, the present chapter is devoted only to such herbs as are distinctly set aside as medicinal by the chants, each of which, with the possible exception of the *hozhóji*, rite of blessing in some of its features, is in possession of a specific medicine for given diseases. This medicine may not prove effective in every instance, insomuch as the source of disease has not been properly traced, when a second medicine, found in another chant, becomes imperative, a process which is repeated until the source has been correctly traced and the medicine will, of necessity, prove effective.

As the medicines vary in number and quality for each chant, they are put up in small pouches called *azé jish*, medicine pouches, and added to the *zá'níł*, equipment. The singer conducting a ceremony is always cognizant of the requisite medicines, which he collects in due season, while the ordinary Navaho is familiar with many from hearsay. The dried leaves, or powdered herbs, are usually soaked in a bowl of water, which in turn is dedicated in one way or other by prayer and song. At times roughly chipped arrow-points (*bés'esh'ugi*), of the color corresponding with that of the cardinal points, are dropped into the bowl from the four directions. The bull-roarer, too, is dipped into it, while the thong attached to it is soaked with the medicine previous to whirling it. These and similar objects, like the thunder arrow (*f'ní' biká'*), with which the medicines are put in touch, presumably add to their efficacy.

The medicine is frequently prepared in a special vessel set aside for this purpose and called *azé bēidlá*, the medicine cup. This cup is sometimes made of tortoise shell (*tsístqél*), or of a gourd (*adé*), or, an ordinary earthen bowl (*lēsá'*) is used. In these the medicine is stirred with the fingers, or with a feather, and administered directly from the cup or bowl. Usually the singer sips of it before offering it to the patient. At times the medicine is not taken internally, but sputtered over the patient in the usual ritual manner, a process extended also to the paraphernalia in use.



*Tortoise Shell
Medicine Cup*



*Gourd
Medicine Cup*

Medicine spoons (*azé dādítqí*), too, are used. In the *béshe*, or knife chant, for instance, the medicine is administered by means of two spoons, called the smooth stick (*gísh díłkhó*), and the fledged stick (*gísh íst'án*). These are



Medicine Spoons

about a foot in length, and are made of mountain mahogany (*tséésdāzi*), which is wound with yarn, sheep wool or calico. The smooth stick is decorated with olivella shell (*yō dijóli*), the fledged stick with flint points (*bés'ést'úgi*), and both are adorned with plumes of the gray eagle (*átsáyāi*). The smooth stick is so called from its smooth surface and blunt point, to distinguish it from the other which is slightly hollowed or flattened at the point. These spoons are placed and held parallelly over the medicine cup when the medicine is given to the patient.

The same chant also requires the two crane bills (*dēldá*), of which one is slightly curved and represents the male crane, while the beak of the female is straight. The dressing (*behadíté'*)

of the male consists of flint or arrow-points secured with a buckskin wrap, that of the female of olivella shell (*yō dasdīsi*, *yō dījōli*). The butt ends are fledged with plumes of the gray eagle (*ātsāyāi*). The interior of the wrap is filled with various medicines, such as *azē lichī* and *azē hájīn*, inserted in a piece of reed (*lúkā*). This dressing of the crane bills is done at a special ceremony which is very rarely performed as few of the living singers are familiar with the prayers. Hence, allowance is made for a scarcity of crane bills, so that one of the sandhill crane (*dēl*), with that of the twigbill crane (*tqōjīnohā*), or the blue heron (*tqāltlā'halē*), may be employed, if bills of the male and female sandhill crane can not be had. The illustration shows a female sandhill crane bill in male attire, while the curved bill is that of a blue heron in female attire. In the progress of the chant they are placed before the patient together with the charm, the medicine cup and the two medicine spoons, whereupon the patient recites verbatim with the singer the *chāehoyatqēi*, or prayer to the gods.



Crane Bills

A partial list of medicines is herewith given.

tlēji azē, medicine for the night chant, consists of *tqāholchōshi*, rattleweed; *azē lādiltēhi*, rockcress, and others.

dzīlkīji azē, medicine for the mountain chant, consists, among others, of *chīl na'ātłōi*, virginia creeper.

anǎji azé, medicine for the war dance, is made up of gǎd ni'éli, red cedar; hazéiltse', yarrow; nishchí bitá, piñon leaves, and tqázhilchín, meadow rue, which are taken internally, while hazáildâi, a grass, with tl'ô' níchín, pennyroyal, are chewed and sputtered upon the patient (já'álgo benáhozhnfyól).

nǎāt'óyě azé, medicine for the lightning chants, varies with the several branches of this chant. azé bâ'áde, lupine, and azé bâ'áde tso, rattleweed, are used in the nǎāt'óyě ba'áji, the chant of female shooters; azé bakhá'ě and azé bakhá'ě tso, both male medicines, are used in the nǎāt'óyě bakháji, chant of the male shooters, while dziłkíji naāt'úyě hatqál be azé, or medicine for the mountain chant of arrow shooting, consists of azé qá'ogísi (azé alkésgísi) and azé qá'ogísi ntsáigi, *Eriogona*.

wolachíji azé (wólächí bohochóji azé), medicine for ant witchcraft, requires wolächídā, an *Eriogonum*, and bís ndōchí, *Eriogonum fasciculatum*, with bís ndōchí bâ'áde, *Eriogonum microthecum*, both of which are previously boiled.

má'íji azé, medicine for the coyote chant, is also called ajíli azé, or medicine for lewd men and women. azé níchín, peppermint; má'istqéi, a greasewood; má'idá, wild cherry, and others, are mentioned as má'íji azé.

hochóji azé, medicine for the witchcraft chant, are too numerous to mention, the list comprising parts of most of the indigenous plants and trees, which are used in one way or other at the numerous branches of this chant.

It is, of course, impossible to enter here into the details of every article used at the numerous ceremonies. Some few have therefor been selected at random and are grouped under separate titles. Allied subjects, as the law of butts and tips, the pressing of the limbs, legerdemain, and others, are also treated here.

SACRED CLAY AND PRECIOUS STONES.—Clays, animal tissues used as grease, and precious stones, are usually assigned to the equipment (zá'níł) and are wrapped in small pouches of buckskin

or cloth and then designated according to their contents. Such are: *tqältlābatā*, clay taken from some sacred spring, for instance, one near salt lake below Zuñi; *dlēsh*, almogen or white clay gathered at some sacred locality; *nā sēlā*, a clay gathered at this sacred spot (probably the vicinity of Pueblo Bonito); *āshî*, salt from one of several salt lakes; *chî*, 'reddle or red clay; *dzillēsh*, dust from the sacred mountains; *dāākēdi lēsh*, dirt from the field, which is not sacred but used as an absorbent when ritual prescribes emesis.

Clay mixed with grease, or at least an ingredient of sacred animal tissue, is largely used in daubing and painting the body of the patient. This sacred tallow or grease is called *tlā' nashchîn*, mixed grease or tallow. (Cf. also Equipment of the bead chant.) *atsāshjīsh nashchîn*, dried liver-bag mixture, is used in pulmonary troubles. The bull-roarer and thong, and the hide rattle, is frequently rubbed with sacred tallow. (Compare also Masks, the War Dance, the Moccasin Game, and Colors.)

By *ntlīs*, hard goods, such stones as *yōlgaī*, white shell; *do-tlīzhi*, turquoise; *dīchīli*, abalone shell, and *bāshzhīni*, obsidian or cannelcoal, are ordinarily meant, though sometimes *tsēlchīi*, red-white stone, is also included. Other precious stones are *tsāghadīndīni*, rock crystal; *tqādšis'ēli*, pearl; *yō dasdīsi*, or *yō dijōli*, olivella shell; *ntlīs altqās'aī*, or *ntlīs nashchîn*, a mixture of vari-colored stones.

Precious stones are frequently employed in connection with the prayerstick as a sacrifice, though many sacrifices are made of precious stones only. As a stone is assigned to each cardinal point, color frequently represents the stones, for instance, in the figures of sand paintings, where the garments and paraphernalia are drawn in colored sand instead of the original white shell, turquoise, etc. Rock crystal is largely employed in tracing incisions, in divination (*destī*, star reading), for symbolic lighting of sacrificial smoke, as a charm, and otherwise.

A small pouch, about the length of the middle finger, called *azē*, medicine, or *dzillēzh*, sacred mountain dust, is held in

the hand during the recital of legends pertaining to the hozhóji, or rite of blessing, as well as during the numerous performances of vigils (do-ighá/h) of this rite. It consists of five wraps or bags of sacred buckskin (dokākēi) into which precious stones and rock crystal are inserted or sewed, together with dust gathered from the various sacred mountains. The five bags are then wrapped with sacred buckskin. The vigils can not be conducted properly without this pouch.

nāyēnezghāni bibēsh, the knife of the Slayer of Enemies, which is variously called qāl, the club, or besh, the knife, or beshqāl, club-knife, is an oblong, flat stone with a slightly beveled, blunt edge, and is used by the personators of the Slayer and of the Water child (tqóbjishchíni) in unraveling and cutting, as well as in the pressing of the limbs. It is the symbol of these two gods.



Knife.

CHARMS.—The charm, eltló (it is fastened), consists of feathers (atsós), arrow-points (bés'ěstügi), turquoise (dotlízhì), olivella shell (yō dijóli), and the like objects, which are secured to a forelock of the patient in the course of some ceremonies. By some they are worn even after the ceremony, when the charm is designated as diyín bequāēholdilzín eltló, or a mark indicative of a holy rite. According to ritual, small arrow-points (bés'ěstügi), to be worn as a charm, must have been unearthed by a gopher. Similar regulations govern the use of other objects as charms.

PRESSING OF THE LIMBS.—The pressing of the limbs is performed at many ceremonies and with various objects. As the text of the song may require, the object is pressed in succession to the soles, the instep, the fibula and ulna, the knee, the femur, abdomen and chest of the patient; thence to the right shoulder, arm and elbow, the top and palm of the right hand, and back to the right shoulder again; from here to the back, thence to the left shoulder, arm and elbow, the top and palm of the left hand, and back again to the left shoulder; finally it is pressed to the

side, front, rear and top of the patient's head, after which the singer or assistant concludes by making a pass with the object across the patient's mouth, from right to left, and *vice versa*. Objects used in pressing are the arrow-points, the knife of the Slayer, the bull-roarer, herbs employed for dressing (chīl é), and others. After each pressure the singer or assistant raises the object toward the smoke-hole (chīláyí') and blows upon it (yéyǒl, he blows it away). In the witch chant (hochóji) a crow feather is dipped into the ashes of the fireplace and the ashes are similarly blown through the smoke-hole by all present.

ída'istsöd, the pressing or stretching of the limbs; bés'ěst'ügi ída'istsöd, the pressing with the arrow-points; nída'istsöd, I press your limbs.

askás, the straightening of the limbs; askás (íkáž, adeskás), I straighten. This is performed by women upon the maiden at the nubility ceremony much in the same manner as the pressing.

USE OF BIRDS AND ANIMALS IN CEREMONY.—qiná bitsós, live feathers, are so called because they are plucked from live eagles (atsá daqinágo). These are ordinarily meant when reference is made to the use of feathers.

atsá bitsé, tail feathers of the eagle, are also obtained from live eagles.

atsósto, the large downy eagle feathers; atsósto tl'ól, the cord to which a large downy eagle feather is attached, is used in tying sacred knots.

nadzēdlózi bitsé, the tail of the roadrunner, is employed as a charm.

gágě bitsé, the tail feathers of the crow, are extensively used in the witch and other chants as a fan or brush for expelling evil spirits. The singer makes passes with them on all sides of the patient and in conformity with the text of the songs. Feathers taken from the bundle are then distributed among those present to be used in blowing off the ashes. Crow feathers are also inserted into the throat to produce emesis at some ceremonies.

gāgē nłchíni (odorous of the crow), designates the lips (*bidá'*) or beak of the crow used at the war dance (*anǎji*).

dasán baghá, porcupine quills, decorate the handle of the hide rattle; *dasán bitsé*, porcupine tail, of which a particle is added to the medicine to remove the spell of the porcupine; *dasán bitěsh*, ashes of porcupine quills, are employed in coloring the patient.

nahashchíd bikhé, a badger's foot, is used in pressing the limbs; *nahashchíd bakhági*, badger hide, or *ayáni* and *bégashi bakhági*, buffalo and cow hides, are employed in making rattles, which are called respectively: *nahashchíd*, *ayáni* and *akhál aghál*, badger, buffalo and rawhide rattles.

tqábă'mâ'i and *chā bakhági*, muskrat and beaver fur, with porcupine quills, decorate the base of the rattle just above its handle, while *ayáni* or *bégashi bitsé*, buffalo- or cow-tail hair, are attached to the end of the handle.

debé tsétqă' bidé, a horn of the bighorn, in which the sacred tallow or fat is preserved.

bizádīl, blood collected from the mouth of sacred animals.

aqéskě, a mixture obtained at the copulation, or from the penis of the buffalo or bat.

bf' bitsíd benáshkhăd, the seam of deer sinew, for which sacred sinew (*dokākēi bitsíd*, or *bf' bitsátsíd*, *tendo Achillis*) is used.

COLLARS.—*zē deilyé*, a collar of otter skin, to which a whistle of cane-reed is attached, is used at public exhibitions of the night chant. Collars made of spruce, the skin of the yellow and kit-fox, or consisting of a large downy eagle feather, are required in the decoration of the masks. Hence: *chő' ilbá*, a spruce collar; *má'i dotłízhi ilbá*, kit-fox collar; *má'ıltsói ilbá*, yellow fox collar; *atsóstso bilbá*, its collar is made of a large downy eagle feather.

Some add the fur of the ermine (*dló'i*) to the decoration of the mask.

SHOULDER-BANDS AND WRISTLETS.—*gāghâhast'i'*, shoulder-bands, are made of sacred buckskin (*dokākēi*) adorned with claws

(akhéshgān, claw-footed) and arrow-points (bés'ěst'ūgi), and are placed over the right and left shoulder of the patient in the witch (hochóji) and lightning (nāāt'ūye) chants. These chants also require the wrist-bands (látsin nastī'), which are placed over the wrists of the patient. They are made of the same material as the shoulder-bands, but are decorated with claws of the fore-feet (aláshgān, finger-claws).

USE OF PLANTS IN CEREMONY.—In addition to the use of medicinal plants, various articles are constructed of herbs, shrubs and trees.

THE BULL-ROARER.—The prescriptions governing the construction of the bull-roarer (tsín dī'nī, the groaning stick) are very minute in detail. It is elliptical in shape and made of pine wood riven by lightning (ndishchí bō'ős'nī'). Its front is mounted by eyes (biná) and a mouth of turquoise (dotlízhi), the rear by a piece of abalone shell (dīchíli), to serve as its pillow (bitsí'āl). The whole is then covered with yucca pitch (tsázî bijé), lightning-struck pitch (bō'ős'nī' bijé), and charcoal gathered from a tree struck by lightning (í'nīt'ěsh). A thong made of bighorn or sacred buckskin is attached through a hole in the butt end around which, too, it is wound when not in use. The bull-roarer is placed in the medicine bowl and the thong is soaked with the medicine by one of the assistants. He then encircles the hogan once or twice and violently whirls the roarer, during which time all remain in silence within. Upon returning to the hogan the thong is wrapped about it, in which shape the bull-roarer is then used for pressing the limbs. The front (bitqél), indicated by the eyes and mouth, is always pressed toward the limb. Finally the patient uses the bull-roarer in blowing the ashes, instead of the crow feathers used by others.



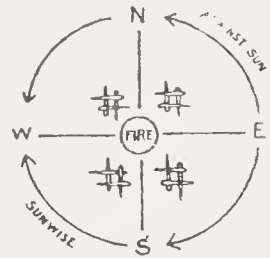
Bull-roarer

THE FIRE-DRILL. Flint rock (*tsëtl'ël*) is sometimes employed in striking fire. The fire-drill (*wolká*), consisting of a tinderbox of cottonwood and a drill (*náyiz*, or *dilyízi*, the whirl; or, *hogíshi*, the drill-stick; or, *beolká*, the igniter), is at present used in igniting the fire at the fire ceremony (*ac'hídidoljē*). Cf. Fire.



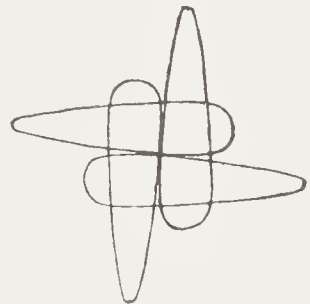
Fire-Drill

THE POKERS, CEREMONIAL UNRAVELING OF HOOPS, ETC.— The pokers (*hóneshgíshi*), four in number, represent four bull- or copperhead snakes (*tłístso*), who lay with their heads to the fire at the cardinal points. Hence, the sticks of piñon (*destsín*) used as pokers are hewn from branches pointing east, south, west and north, in which respective positions they are placed around the fire with their butt ends pointing to it. This is done on four successive days during the witch chant, after which they are deposited in the branches of some tree with their tips (*nosél*) pointing northward.



Fireplace

In connection with them the *yēibitsázi óltqād*, or *kékēholtqād sāsî*, fireplace yucca for unraveling and stepping, are used. These, too, are four in number, and made of four wide leaves of yucca (*yēi bitsázî*), intertwined in the shape of a star. One of them is placed aside of each poker, where they remain during the entire fire ceremony (*ac'hídidoljē*), after which the patient is made to encircle the fire by stepping successively on each knot, beginning with the one in the east, and finishing at the north knot. Two of those in attendance now hop over the fire, stepping from the knot in the east to that on the west side, and from the knot on the south to that on the north side of the fire. Thereupon the singer unslips the knots and the



Yucca Star

yucca is carried to some secluded spot.

Unraveling (*öltqád*, *wöltqád*) is done with numerous objects. Thus with the hoop (*tsábâs*) made of spruce, or with small hoops (*tsábâs yâzhe öltqád*), which are used at the witch chant (*hochôji*). The latter are five square hoops, varying in size, and made of sumac (*kî*), chokecherry (*džîdzé*), wild cherry (*mâ'idá*) and scrub oak (*clîéchîl*), different twigs being used for the four successive days. A bunch of grama grass (*tł'ô' nastqási*), sagebrush (*tsêzhî'*), watercress (*tqúikhâł*), dodgeweed (*tsîl dilyísi*), and the like, is secured to the corners of each hoop by an ordinary slipknot



made with the downy feather cord (*atsôstso tł'ól*). The largest in size is placed about the feet of the patient, who is seated with cocked knees; the next about the knees; the third about the abdomen; the fourth about the chest; the fifth and smallest hoop encircles the head. Thereupon the singer unslips each knot, and weeds and hoops are carried out.

The wide hoops (*tsábâs ntqêligi*) are larger in size, but made of the same material as the preceding, with the difference that



on each of four succeeding days one of five hoops is made of sumac, chokecherry, wild cherry, scrub oak, with the additional one of spruce. These are placed on the outside with the one of spruce next to the hogan, the others following in the order mentioned. On the first day they are lined up on the east side of

the hogan; on the following day on the south side; on the third day on the west side, and finishing the ceremony on the fourth day on the north side. Two feathers (nditqf), representing lightning (atsínltłish), are set crossing each other in front of each hoop. The patient followed by the singer pass through each hoop, which is then unraveled by the latter.

The unraveling of wreaths (chīl' öltqád) is also a feature of this chant. Strips cut with a claw of the shoulder-band from wide-leafed yucca (tsázî nt jéli) are tied together (beëstl'ó') and then braided at intervals (bitqát'ă' deshбіzh) with from two to nine bundles (naăst'af dădijol) of weeds. The knot employed is a single twist and turn around the bundle sufficient to hold it in place. The personators of the Slayer and Water child secure a wreath each to the soles, instep, lower and upper leg of the patient; then to his hips, chest and back; one to the arms and hands, adding the final one to the forehead. The latter wreath is distinguished by two turkey feathers (tqázhi bitsé) to which an olivella shell (yō dījóli) is attached. This done, the Slayer and his Brother proceed to cut the wreaths with their knives (nāyēnezghāni bibēzh) from foot to head, after which each single knot (bitqát'ă' deshбіzh) is severed, and the weeds sprinkled over the patient, or, his limbs are pressed with them. Finally, the weeds are cut into small fragments and then deposited in some unfrequented spot with their tips pointing northward.

Unraveling is performed in a similar manner with the spruce dress (chō' æ, or chō' bi'æ), a conical shaped covering made of spruce twigs; with the dress of weeds (chīl' æ), a wrap made of weeds; and with the mask of yucca (nikæhe).

CEREMONIAL BATHS.—In the witch chant a bath (tqádīdogis) is prepared in a basket. Two leaves of yucca (tsázî bidé, horn-leafed yucca, or tsázî tsós, slender yucca) are stirred in a basket of water by two assistants, one holding the tips of the leaves, while the other whirls the butt ends between his hands. The bath produced is sprinkled with a line of pollen from north to

south, then crossed by a line from west to east, from which point the singer draws a circle around the four points of the cross. Within each block of the encircled cross another smaller cross is drawn with pollen, after which the patient bathes his body. (Women conceal themselves behind a curtain held by female assistants.) Cf. also the Sudatory.

INCENSE.—Incense (*yā'dīdī'nīl*, that which is placed before the patient) consists of herbs like *ayān ilāghái* and *dahidī'ái*, mixed with bat hair (*jāābāni*), or of amber (*tsējé*), and a stone called *tsē bijékbāl*, the fumes of which are inhaled by the patient. The incense is sprinkled over live coals raked from the fire, and to facilitate inhaling a blanket is drawn over the patient.

THE LAW OF BUTTS AND TIPS.—The law of butts and tips obtains with unvarying regularity in a number of ceremonial paraphernalia. The manner in which the twigs are woven in the basket, or of applying medicines, and of pressing the limbs, the position of the figures in the sand painting, or of the eyes and mouth of the bull-roarer, are but instances of this law. With feathers, herbs and sticks, used ceremonially, this law is strictly observed, and is referred to as *nosél*, or *dinosél*, the growing part or tip of a feather or plant. Thus, the feathers are inserted with the tip extending from the seam of the mask, or from the ceremonial cigarette, and plants are employed and deposited with due reference to the tip and butt ends.

BOWS AND ARROWS.—The small bow (*altqí yāzh*) of spruce, and the arrows of pine (*ndishchíká*) and spruce (*chō'ká*), are dispatched over the hogan at the lightning and witch chants. They are also designated as *mā'i bilndzízi*, arrows for dispatching the coyote.

SPREADS.—The patient is always seated on a spread of buckskin or a piece of calico, upon which, too, medicines, feathers, and other paraphernalia, are deposited in the progress of a ceremony. These spreads, called *nīlkhád*, or *benīkhái* (which is spread out), are given in payment to the singer after the close

of a ceremony. Both buckskin (*abáni*) and calico spreads may be used by him for the smaller medicine pouches (*azé dabizís*), or for thongs and cords to tie them singly and collectively (*jish bídatlöl*, thongs for the medicines of a chant, and *azé bídatlöl*, thongs for the medicine bags). With the exception of the bag containing the sacred mountain dust (*dzillézh bizís*), all smaller bags may be made of spreads, as: *ntlís bizís*, bag with the stones; *tqādidín bizís*, pollen bag; *ātsōs bizís*, wrap for the feathers, and so on.

THE MESSENGERS, LEGERDEMAIN, ETC.—*ākā nīnli*, sprinklers of pollen, are the messengers sent out on the fifth day to invite singers of other rites to attend the closing exhibitions. Originally they were sent to foreign tribes also, a feature which has been discontinued long since. After sprinkling the pollen upon the head of the invited guest, the latter offered the messenger some object in token of his acceptance. As the singers to-day are invited for public entertainment, they usually carry their masks, rattles, whistles, paraphernalia (called *alíl*, magic or power), and the like, with them. Thus, at the fire dance (*dzīlkfji*), various legerdemain (*alíl*) was, until very recently, still in vogue; for instance, the dancing porcupine quills, the growing of the yucca or corn, bathing the hands in hot pitch, walking on cactus, production of field rats, gophers, and the like, performances to which little attention is paid at present. The illusion of swallowing the arrow is made possible by the use of a hollow sunflower stalk, into which the shaft and arrow-



Arrows for Swallowing.

point are gradually and slowly hidden. The *alíl*, or *legerdemain*, was deposited in the medicine lodge (*alíl báhoghǎn*) and women were not permitted to enter and see them. They were, therefor, covered and if, perchance, an inquisitive female was caught in the act of gazing upon them, she was forced to enter the corral and to dance, nilly willy. The disgrace attached to this chastisement effectively checked a repetition on the part of other women. Otherwise women did not perform as dancers, excepting the case of young girls who had voluntarily learned to dance.

WORDS

atsǎlē, the groups of dancers entering the corral.

qiná bī ishlě, or *qiná ashlē* (*áshla*, *adeshkíl*), I animate it.

imáshjǎn, the corral (dance), or *azhnǐdá* (they move around the fire), the fire dance; *iikhǎ*, they enter; *óókhaǐ*, the dancers are now inside the corral; *diné daǎlzhǐzh*, they dance; women do not perform, but their parts are taken by men dressed as women.

íǎsh, the two enter, namely, the man and woman who enter the hogan at sunset of the last day of the night chant, after journeying from sunrise over a course of about a mile.

yě'íǎsh, the gods appear, or *kǎd yě'íǎsh*, to-day the gods appear, this is the final day (of night chant). Three masked personators, girthed with skins of kit-fox, their bodies painted with white clay (*dlěsh*) and charcoal (*těsh*), and representing the Talking God (*hashchěltqǐi*), the Shooting God (*hashchěolt'óhi*), and the Fringed Mouth (*záhǎdolzhǎi*), visit the neighborhood in search of contributions of coffee, flour, tobacco, and the like, for the final festivities. Being masked, the Talking God alone is permitted to make their presence known by his call of "u-u-u-hú." They do not tarry very long but move quickly from camp to camp.

bijí, the close of a ceremony; *iskhágo binǐljí*, we close tomorrow; *dí hadzi*, there are four more nights of ceremony, the fifth day of a nine night ceremony.

do-ighǎzh, the vigil, or blessing of the paraphernalia.

hatqál, a chant; hatqáli, a singer; sîn, a song; biyîn, his or its song; tlējísîn, one of the songs of the night chant.

nahaghá, the ceremony or chant of which one has made a specialty, religious customs and beliefs, as ndabagháigi hódinsîn (nt'ê), I respect the old customs and beliefs; dobi'ilílda, he disrespects and ridicules them.

á'honishtqál (á'honítqāl, á'hodíneshtqál), I begin a singing.

á'hunítqāl, the ceremony began.

qüşshlál (quúsá', qodeshlál), or náqunshlá (náquúsá', náhodeshlál), or qodishlá (qodásá', qodeshlál), I invite a singer. Hence, hodaghá' (qodeyá', qodogál), the ceremony is in progress; hodesá', or náhodisá nt'ê, I return from the invitation, I have asked him to sing; nahalá (nohuniyá), he is conducting a ceremony.

nóhunshtqál (nohúntqāl, nohodeshtqál), I close the singing or ceremony; nohúntqāl, the ceremony is over with; nohoghá' (nohúniyá, nohodogál), or nohojítqál (nohózhntqāl, nóhozhdotqál), the ceremony is closed.

do-nadáda, no admission, or khúji do-njagháda, no admission here.

húnsdzîn (hónesdzîn, hodínesdzîl), I bewitch him; nínsdzîn (nínesdzîn, ndínesdzîl), I bewitch you; hónodzîn, he bewitched him (evil eye).

sizā'fâ, he put it into my mouth, he performed the ceremony over me; hazâot'ă', he performed over him.

naākhaí, they appear, the yéibichai will take place.

nóhunshlá (nohúisá, nohodeshlál), I performed the ceremony in response to an invitation.

kátso istán, the big arrow fledged, arrow for swallowing carried by the atsálē (dancers) at the ináshjîn, or corral dance.

SOCIOLOGY

CIVIL ECONOMY

Socially the Navaho are not distinguished by classes of nobles and common people. They are not subject to the rule of one chief, or to that of hereditary chiefs. Their chiefs are not chosen from one specific clan possessing such a distinction, but are taken from all clans, as socially they are all equal. And as a genuine democracy prevails the chiefs or headmen are chosen from the rank and file, holding their position by popular choice, and as long as they fill it satisfactorily.

In the earlier days the tribe was represented by twelve chiefs who, in council assembled, were subject to four spokesmen, whose eloquence and discretion entitled them to the choice. This was, moreover, in accord with the legendary organization of the lower worlds, in which a chief was assigned to the cardinal points with the priority of rank in favor of the chief of the east. There as here, all matters of importance, of war and peace, life and death, were submitted to the council of the chiefs for decision. And though some chiefs by dint of eloquence and their personality exercised such a right individually, the authority of the others, or sub-chiefs, was never impaired thereby in their various districts where they enforced the injunctions of the council.

The installation of a new chief was not accompanied by a religious ceremony, though the deposition of an unsatisfactory chief was at times followed by a feast at which the new chief was formally installed. It would seem, too, that the government

of the tribe was not, as a rule, entrusted to the singers, or medicine men, unless they showed unusual ability and peaceful dispositions. On raids and in war the singer always accompanied the party, performing the ceremonies and rites previously to as well as during and after an engagement with the enemy. And as many raiding parties often formed independently of the tribe as such, or without the knowledge of its leading headmen, it was of no infrequent occurrence that some pretentious and ambitious singer inaugurated such raids to the detriment of the tribe at large. Hence, to check such influences, the necessity was felt of filling the ranks of the chiefs with men making no profession of singing, unless they showed unusual consistency.

To-day the tribe is represented by a large number of headmen whose authority is confined within the limits of a small district. Accordingly, the more populated districts are each represented by a headman chosen by the consent of the people of his district, and approved and recognized by the other headmen of the tribe (and now generally by the agent). The headman directs, for instance, in matters pertaining to agriculture, taking out ditches, or clearing and breaking new soil. He is arbiter in matters of dispute for the people of his district, whose interest he also represents at the councils (and with the agent). In matters of importance to the tribe the headmen of the various districts convene in council. At these gatherings each headman voices his opinion, arguments are produced pro and con, until some satisfactory solution is agreed upon, which from the council is carried to the knowledge of the people at large through the headmen. (At present such gatherings occasionally take place at the agencies, and are convoked by the agent, who also safeguards the observance of law and order.) It may be said, too, that the Navaho in general cause very little disturbance. In fact, no trace of the early warlike spirit remains. The chiefs of war of earlier times have entirely disappeared. Slavery, too, as a reciprocity measure, is not upheld any longer. The slave was forced to labor for his captor by agriculture, herding, and every-

thing arduous. Female slaves were not taught the art of weaving, which was the sacred trust of Navaho women. In addition, the captor might take the life of his slave, sell or dispose of him at will, and upon the death of his master the slave was dispatched immediately after the burial was performed. This condition no longer prevails, though occasionally one hears mention made of members of other tribes who are held as slaves. There are, however, no instances on record in which a Navaho was subjected to slavery by his own tribesmen.

The custom of performing a ceremony for the benefit of the headmen has now entirely disappeared. In the early days the vigil ceremony (*do-īghāzh*) was held four times during the reign of a headman to protect him from misfortune and insubordination. This feature has vanished, as well as that of distinguishing the headmen by a special mark, such as a costlier robe, an arrow-point tied to the queue (*bés'ěst'ūgi beěst'lóni*), or an agate (*hada-huniyé'*) or feather (*atsós*) instead.

natāni, or *binantāi*, the headman; *nantā*, a speaker, spokesman.

hozhóji natā, a peaceful chief, the chief in time of peace.

hashkhéji natā, a war chief, a warlike chief.

ana'ályā, reappointed, or *nābideltqí*, confirmed or reappointed to a position (modern words).

THE GENTILE SYSTEM

The Navaho are divided into numerous clans or *gentes* forming a bond of union and relationship between members of the same clan, as well as between those of affiliated clans. The names of these clans are entirely locative or topographical, not excluding names of an apparently totemic character, such as the bear, or turkey people, since in such instances the locality in which these peoples were found was suggestive of the clan name. In fact, totemic names, or even traces of an early totemism, have not been discovered, and are flatly rejected by the Navaho. Some clans, indeed, regard certain animals, such as the bear (*shāsh*),

the porcupine (dasáni), the bullsnake or copperhead (tłistsó), the weasel (dlú'i), and the mountain lion (nashdúitso), as especial pets of their clan (lī, pet; bilí, dalí, their pet). Yet these were assigned to the respective clans after their creation, and have at no time been emblematic of the clan, or in any wise affected its nomenclature. Accordingly, too, the custom of emblazoning their shields or robes with clan totems, as the Navaho had occasion to observe with the Zuñi and other Pueblo tribes, never was in vogue with them, and was ever rejected as of distinctly Pueblo tradition. And the custom, too, of sparing the coyote, hawks, snakes, some species of bear, etc., has evidently no bearing on the subject, since that is done for religious reasons.

With the large number of existing clans to-day it is not at all surprising that accounts of their origin, and incidentally of their affiliation and assignment to various groups, are at great variance. The accounts of their origin are, of course, legendary, and differ with various authorities, who are often not free from the apparent desire of creating an eponymous ancestry, or rather, eponymous localities and peoples, in support of the prestige which their own clan should enjoy. And as these accounts are fitted into the numerous chant legends the confusion is by no means lessened. Still, these accounts agree on the one point, that the numerical increase of the clans is not due to a process of segmentation of existing clans, but to one of adoption of new peoples which were met in the course of the journey to the present habitat of the tribe. Accordingly, the phratry is eliminated, in fact, it is unknown to the Navaho, who makes no such distinction. Each clan, therefor, forms a separate whole, which is socially the equal of others with whom it is perchance affiliated by consanguinity or adoption. Naturally, this affiliation or relationship caused some clans to be grouped with earlier, or nuclear clans, which gives the latter occasionally a phratral distinction.

The relationship between the clans was, according to the accounts, established either by intermarriage, or by closing a friendship with new and strange tribes or clans as soon as they

met. Whenever mental derangement was subsequent to such marriages there could be no question of the prohibitive degree of consanguinity, and the necessity of intermarriage with non-related clans was once for all established. Exogamous marriages, too, were not uncommon, especially during that period in which, according to their tradition, the Navaho and Pueblo tribes lived as one, and the new clans thus formed were adopted by the husband's clan and affiliated to his group of related clans. The tribes were, of course, destroyed by the flood of Navaho tradition. A nucleus, however, of a new tribe had been saved by divine intervention, so that representatives of the original clans still remained. These formed new ties with the Pueblo and other tribes as a result of concubinage with slaves and captives, the descendants of which subsequently waxed sufficiently strong to form new clans and assert their independence of their captors. And since their relationship with clans affiliated to that of their captors is not sufficiently well established to be beyond dispute, they are numerically strong to-day owing to their limited relationship. Strangely enough, some of the post-diluvial accessions, such as the Jemez, Zia and Ute clans, coincide both in name and affiliation with the original clans adopted by the Navaho from these tribes. These latter, however, are not regarded as captive clans, like the more recent additions, as their relationship with all the clans of their group is never disputed. And, since the various bands of Pueblo refugees and captives entered the tribe at different periods, and even among the so-called ante-diluvial clans scarcely one is without historical data tracing its origin and recent progress, the original accounts are now generally embellished with modern historical data, which is usually the trust of some intelligent representative of the clan.

But, withal, the question of consanguinity is paramount in the gentile system. Though, properly speaking, there is no *phratry*, the nuclear, or adopting clan, often enjoys phratral distinction by choice of the sub-gentes, who sometimes refer to themselves by their phratral connection, as, for instance, the *tqodokózhí*

na'ideshgīzhnī, the Jemez of the alkaline water clan, or, the khīyā'āni shāsh dinā'ē, the bear clan of the khīyā'āni, thus indicating their consanguinity by adoption. Double clan names, however, indicate adoption by one of the two clans, as will be seen later, and the quasi-phratral connection is therefor, as a rule, not indicated in this manner.

Among the clans four claim the distinction of originating directly from the person of esdzānādle, the Changing Woman. The khīyā'āni were created from the skin which she removed from her breast, wherefore their name is said to signify, "those made of her breast." In like manner, the honaghā'nī, or "they who were made of her back," were created from the skin which she loosened from her back, while the tqodichīnī, "bitter water people," and the tqótsōnī, "big water people," are so called because of their creation from the sweat (or skin) gathered from below her right and left arm respectively. Thus she formed the nucleus of the tribe to which she presented the pets above mentioned, and dispatched them to this earth. In the course of this journey they met with other holy peoples like themselves with whom they made friendship or ascertained their relationship.

But while the following list does not propose to present the clans in the order in which they may have entered the tribe, an endeavor has been made to present a reliable classification of the related clans as they exist to-day. The clan right is exercised in the first instance by the mother, hence, all her children belong to her clan. In addition, intermarriage with the clans affiliated with hers is prohibited, which prohibition also extends to the father's clan and those related to it. This prohibitive degree was formerly also extended to the whole group of the grandfather's clan, but is now generally disregarded and limited to the two groups in which the father's and mother's clan happen to be affiliated.

The various groups are indicated by roman letters preceding the nuclear, or most important clan of the group.

- I. 1. khīyǎ'ǎni, people formed of her breast.
2. tqēhogǎni, people of the white valley.
3. azétso dinǎ'ě', big medicine people.
4. bitǎni, leaf people. Some derive this from bitqāt'ǎni, they who passed along the side of the cañon.
5. dzilt'ád dinǎ'ě', or dzilt'ǎni, at the base or lower side of the mountain people.
6. shǎsh dinǎ'ě', bear people.
7. tqázhi dinǎ'ě', turkey people.
8. nadá dinǎ'ě', corn people.
9. khīyǎ'ǎ', where the houses stand (up, or on high).

- II. 10. honaghá'ni, the people formed of her back.
11. dzilt'ǎ'ni, the people at the base, or in the rincon of a mountain.
12. tqoqǎni (tqoǎqǎni), water is close by. (The dzilnáhodílni are now extinct, but were accredited to this group).
13. tqāneszá'ni, poles strung out at the water people.
14. hashkáhadzōō, where the yucca is strung out.
15. nīhobǎni, light-colored soil people.

- III. 16. tqodichíni, people of the bitter water (i. e., formed of the sweat of her right arm).
17. bí'bitqóni, people of the deer water (country). The next two are assigned to the preceding clan.
18. tsīn sakhádni, people at the lone tree.
19. tqó bazhnǎ'ázhi, where two went for water.
20. tqō dokōzhi, alkaline water.
21. mā'ideshgīzhni, coyote pass, or Jemez people.
22. tl'ōgi, fluffy, or grass-mat people, because they wove mats of grass and yucca. Later these were identical with the Zia people.

- | | |
|-------------------------|---------------------------|
| 23. tsěikhěi, or tséyī' | rock, upon which they |
| khěi, twin-rock people, | were wont to mount. |
| from pillars of | 24. yóō, the bead people. |

IV. 25. tqótsonī, the big water people (i. e., formed of the sweat of her left arm).

- | | |
|---|---|
| 26. bitǎ'nī, the folded arms people. | 28. tsédeshgizhnī, the people at the rock pass. |
| 27. hashtǐshnī, the mud people, because they made many earthen wares. | 29. lúkā' dinǎ'ě', the reed people. |
| | 30. tsětqǎ'ǎnī, the people at the monocline. |

V. 31. tqábâha, at the edge of the water, because they dwelt there.

- | | |
|---|--|
| 32. haltsǒi, living in the meadow. | low people, living at the willow grove. |
| 33. kǎnǎnī, the living arrow people, because they were skilled in making arrows, and supplied all tribes with them. | 35. chězhnī dī'ǎi, the malpais trap dyke (people). |
| 34. kǎf dinǎ'ě', the wil- | 36. tsǎ'hiskǐdnī, knolls covered with sagebrush. |
| | 37. mǎideshgizhnī, another group of the Jemez, assigned to 31. |

VI. 38. hoghǎn lǎni, many hogans (ironically).

- | | |
|--|--|
| 39. tsénahabǐlnī, people at the overhanging ledge of rock. | ters (rivers). |
| 40. tqóǎqǎdlǐnī, at the crossing of the wa- | 41. nakhaǐ dinǎ'ě', the Mexican people, adopted and freed by the preceding clan. |

VII. 42. tsínajíní, the black streak of wood people, because they thrived on a black stalk growwell, called azē hajíni. In addition, their country was covered with a dark soil and underbrush, which from a distance resembled a black streak against the horizon. Hence, they were known as the dark streak of wood people.

43. tlāshchí (tlāsh-chí), the red lefties, because the soil of their country was a bright red, and its people strongly built, and left-handed.

44. khīn lichíní, the people of the red houses.

45. deshchíní, at the bend of the red rock (people).

46. tlízi lání, many goats, but this is a modern clan, sometimes referred to as the red goats.

47. tsénahabílní, the same as 39.

48. kái, the willows, because they made many ketán, prayersticks, of willow, as they are made to-day.

49. tís jábāni, at the gray cottonwoods.

50. nódā'ā, the Ute clan.

VIII. 51. tqáchíní, the people of the red soil, or country.

52. nāneshťézhí, black across, because of their mode of cutting their hair short at the forehead, and spotting their faces with

black paint. The Zuñi clan.

53. khīn lichíní, same as 44. The red house people are identical with the San Juan Pueblo.

IX. 54. tsenjíkhíní, the people of the black houses.

55. tsendzíłsoi, those of the yellow houses, as these

two holy peoples lived in dark and yellow houses. Those living in the dark

houses, or the half of the village which was dark or black, were of a dark complexion, while those living in yellow houses were light, or blond, hence the names.

56. áshîni, the salt people, or those of the place covered with salt or alkali.
57. debé lizhîni, San Felipe, a modern clan.
58. má'ideshgîzhnî, another group of the Jemez clan.

Various informants offer translations of the clan names which are greatly at variance. However, after consulting the works of eminent authorities on the gentile system, such as those of Dr W Matthews, A M Stephen, and of others, and comparing them with additional data obtained from representative authorities in the tribe, the present translations are thought to be fairly reliable. As was suggested previously, there are additional clans assigned to some groups, or to specific clans, whose relationship, however, is not entirely beyond dispute. Thus, the tqábâha of group V claim the nānesht'ézhi, or Zuñi, and the dziłghá, or White Mountain Apache, as relatives, in addition to such spurious clans as the na'ái (na'áha), at the dip of the mountain, and the ná'sáz dinǎ'ě', or the wanderers (cliff-dwellers). Similar clans are those descending from captives taken from the chíshi, Chiracahua Apache; nakétlǎ', Pima; dilzhǎ'ě, Mohave; áyǎkhîni, Hopi; báýodzîn, Paiute; nashgǎli dinǎ'ě', Mescalero Apache, etc., which are fairly well distributed among the older Navaho clans. At present new clans are not added, and the distinction between slave and Navaho clans is practically nominal, as the title of the former to clanship is of long standing and well established. Yet, while the adopting clan as a rule acknowledge a tie of consanguinity with the adopted or captured clan, this is not always done by the clans affiliated to the adopting clan. Consequently, intermarriages between captive clans and those affiliated to their captor sometimes take place, yet not without

criticism from the older Navaho clans, who admit the relationship, and wish their traditions observed.

Sometimes double clan names are met with, as the *deshchíni bit'á'ní*, or *t'lashchí bit'á'ní*, which indicate that the *bit'á'ní* clan adopted girls of the *deshchíni* and *t'lashchí* clans, whom the latter had discarded. Hence, they were *deshchíni* and *t'lashchí*, respectively, by birth, but *bit'á'ní* by adoption. Their descendants, however, refer to themselves as belonging to the *bit'á'ní*, and reject the claims of their progenitors. Accordingly, their affiliation is disputed, and they are referred to as *diné dobáhozini*, the doubtful clans, or persons of a doubtful clan. Such instances are few, however, and it is generally acknowledged that a member is added to the clan by birth only. Moreover, the clan can not now disown its members, as any effort in this direction is thwarted by the other clans.

The clan always enforces its right to its members against other clans. An instance of this may be found in a custom, which in part is still observed. Upon the death of her husband general good custom required the widow to marry his brother, or some close relative of her late husband. In the event of more than one brother she was at liberty to choose among them, which she did in the following manner: Some time after the death of her husband she made two carrying baskets (*tsízis*), one of which she filled with cornmeal (for preparing mush, *tqá'níl*), the other with paper-bread (*ášt'é*), and placed two boughs of wild grape (*dzidzé*) and redbush (*lichí*), in the form of a cross, over the whole. She then proceeded with the baskets to the hogan of the desirable party and placed them some distance from it, so that they might be gathered and their contents consumed by the family. This done she returned to her home. Subsequently, after four days, the husband-elect stripped off his garments, and taking his bow and arrows, proceeded to place them in the hogan of the widow, where he slept that night. On the following morning both washed themselves in a bowl of yucca suds, and combed one another's hair, which concluded the marriage ceremony.

Similarly, a widower carried his bow and arrows to the house of a desirable relative of his late wife, offering and concluding marriage in the same manner. But when it was thought desirable to evade this duty, as in the case of a large family, or otherwise, the clan was obliged to inform the widow, or widower, of the ineligibility of the desirable party, thus granting them liberty to choose among other clans. Moreover, this protestation must precede the formal and public request for marriage made by the widow or widower in the manner above indicated, lest the party chosen be forced to submit. (Polygamy is still permissible, polyandry was always avoided as adulterous.) Accordingly, the period of widowhood was extended to two years to give ample time for consideration. This period is still observed by some, though the custom of carrying the baskets and the bow and arrows has entirely disappeared. The clans also assert their traditional rights, holding the widow until she obtains her release either by marriage (and divorce) or by their consent. In the event of a refusal other clans avoid her, though such a release is at present often purchased by sexual intercourse with one or other clan relative of the deceased, after which all obligations are considered fulfilled.

For other effects of the gentile system see feuds, marriage and mortuary customs, and other articles.

In addition, it is reprehensible to marry a woman with whom one has concluded a friendly relationship by frequent visits and endearing terms (*kě jínígo*, when one has called her friend), as this is equivalent to consanguinity with her.

WORDS

a'á da dinǎ'ě, or *tà dǎntqǎ'i dinǎ'ě*, the various clans; *bikě* (*bikěi*), his relatives (clansmen); *akě ndlí*, or *da'á dinǎ'igi ndlí*, the two clans are related.

qat'ish dinǎ'ě ndlí, or *dā dó nǎ'ě ndlí*? to which clan do you belong? *ǎi dinǎ'ě nshí*, I belong to that clan, or *shí tqábâha nshí*, I am a *tqábâha*.

shīl aqishdīlchīn, we are of the same clan (related); yashchīni, related ascending, namely, the father's and mother's clans; nāshdeshghāzh, he married back into the clan of his deceased wife (or husband); cliānā'i, the privilege of doing thls; kenjīkedi, adultery with relative or related clansman.

kē cliætqanāgis, it is impossible to disown a clan relative, or chāe ānāl'i, it is useless to turn a member out.

KINSHIP

Navaho tribal society is based primarily upon kinship arising from clan affiliation, as each person is a member of the tribe by reason of his or her affiliation to one of the numerous gentes. This kinship is firmly established and well known to the tribe at large, and some sort of government was introduced largely to maintain the rights and reciprocal duties of kinship, as in the case of feuds and criminal offense against any clan member. The gens, or clan, thus forms one large family within the tribe, the units of which are linked together by one common parentage. Even connubial vows do not sever the bonds of consanguineal kindred arising from clan affiliation, since the clan never loses its right to one of its members.

Accordingly, too, terms which are used to designate real consanguineal kindred, such as my brother, uncle, sister or aunt, are promiscuously used in designating clan kinship as well, and incidentally indicate the social relation in regard to matrimony which these consanguineal bonds enjoin.

The present list contains the names of the lineal ascendants and descendants, which are given in the personal form. The collateral lines of brother and sister, father and mother, show many identical names and a tendency to reduce the remoteness in relationship. Neither is it customary to duplicate terms in the designation of remote relationship, though this is at times done by way of exactitude, as shizhě'ě' bizhě' bidězhi biyāzh bitsf', my father's father's sister's son's daughter, instead of the generic term shināli.

Relative age is differentiated in some instances, as with the younger and older brother and sister. No special term exists to designate the first-born, or eldest child. The mother usually designates her child in terms not in use by the father.

WORDS

shĭ, self.
shizhĕ'ĕ', or shitqá, my father.

azhĕ'ĕ', the father.

hazhĕ'ĕ', or bizhĕ'ĕ', his or her father.

shamá, my mother.

ðamá, or qamá, his or her mother.

shináli, my paternal grandparents, my paternal ancestors. The entire collateral line is referred to as shináli (pl. shinálikhĕ), such as my granduncle or aunt, etc., though for these and remoter kindred such terms as sitsĭli, my younger brother, etc., are employed.

shicháí, my maternal grandfather; shichó, my maternal grandmother, or my maternal ancestors and kindred. shináli is also used to designate this collateral line, though more frequently terms denoting closer relationship are employed, such as shidá'i, my uncle, for my mother's uncle,

or sizédi, my cousin, for my second cousin, or shidézhe, my younger sister, for my mother's aunt's daughter, etc.

shidá'i, my uncle (mother's brother).

shaká'i, my aunt (mother's sister, who is frequently addressed as shamá, my mother).

shibízhĭ, my uncle and aunt (paternal). shizhĕ'ĕ', my father, is also applied instead of shibízhĭ, my paternal uncle, much like the preceding. shináli is also applied for my father's uncle or aunt; sizédi, my father's niece, etc.

sizédi, my cousin (both male and female).

shĭlnā'ash, my cousin (male). Frequently other terms are used, such as shĭnai, my brother (older than self); shidézhe, my younger sister. Second or third cousins are not especially designated, but are called sitsĭli, my younger brother; shidézhe, my younger sister, respectively. Some, however,

note a distinction for the descendants of a maternal aunt, thus, *shichǎ́*, my daughter, designates my aunt's son's daughter; *shidá́*, my nephew, my aunt's daughter's children.

shínai, my brother (older than self).

sitsíli, my younger brother.

shádi, my sister (older than self).

shidézhe, my younger sister.

sikís, my brother (*akís*, the brother; *hakís*, his brother), and *shilá́*, my sister (*halá́*, his sister), are employed promiscuously for younger and older brothers and sisters, respectively.

shamá yázhi, my niece, or specifically, my sister's daughter.

shidá́, my nephew and niece (designating both brother's and sister's children).

shibízhí, my nephew's children.

shiyé́, my son.

ayé́, the son.

qayé́, or *biyé́*, his son.

biyázhi, her son, or little one, a term not employed by the father of the child.

sitsí, my daughter.

bitsí, his daughter.

shichǎ́, my daughter, is used by the mother and others referring to the girl.

sitsǒf, my daughter's or son's child, grandchild.

sitsókhě, my grandchildren and their descendants.

tǎla haijě, who went forth together. or *dałai aqolchíli*, born from one, relatives, kindred. Or, interrogatively: *dǎ́ tǎla hojěish itě́?* or, *dǎ́ dałai aqolchílish itě́?* are (the two) related (in any way)?

da bizhé'ě, his real father.

bizhé í'íni, his stepfather.

AFFINITY

shāyě (*shiyé*, *shaǎyě*), my son-in-law, the same word designating also my brother- and sister-in-law.

shizhǎ́ád, my daughter-in-law.

shādaní, my father-in-law, or, promiscuously, also for son-in-law, as *bādaní*, his son-in-law, or, finally, for the collateral line, as *bādaní*, my wife's uncle or nephew, etc.

duish'íni (*doyish'íni*), whom I do not look upon, my mother-in-law.

WAR

The life of the early Navaho was one of continuous war and rapine, the neighboring Pueblo and Mexican villages usually being their victims. This mode of life necessitated a constant change of domicile, and made the pursuit of native industries practically impossible, as strenuous activity in war gave way to comparative indolence in time of peace. Yet, like most of the Plains Indians, the Navaho was well inured to the vicissitudes of climate and poverty, as the warrior must needs bend all his energies on constant exercise, privation and endurance, qualities which were decisive factors in primitive warfare. This training was begun early in life. Infants were bathed in the snow for the purpose of hardening them to the constant change of climate. Boys and youths were urged to continuous exercise in running, dodging, the use of the shield and spear, in shooting, cunning, and every artifice known to the more experienced warriors. Their diet was meager, consisting wholly of corn and venison, or of esculent herbs when corn was wanting, and water to furnish the wherewith to drink.

When at leisure and peace the tribe roamed over an extensive territory, the security of which was insured to some extent by sentinels placed on guard at conspicuous elevations, whose duty it was to signal by smoke or fire. The signal given it would change its habitat, as it was preferred to avoid an encounter unless practically certain of victory. Apparently no special code of signals existed for the various neighboring tribes, and attacks were usually and preferably made upon isolated bands of enemies, or unsuspecting settlements, opportunities for which were very favorable among the scattered Pueblo.

The most experienced headman was chosen leader in an engagement, though in the heat of battle each warrior insured his own safety. An action was always begun with much clamor and a charge on horse, bringing shield and spear into play. At close range bow and arrow were effectively used, though quite frequently refuge was sought in a hasty retreat.

Raiding parties were usually formed of small bands as this method insured larger dividends to the members of the party. In war and on raids, however, the party must be joined by a singer of the war rite (*yéihastqínikě*) to celebrate the victorious deeds of the war gods, such as the Slayer of Enemies, the sun and moon, etc.

An enemy was usually scalped without previous torture, but if possible, he was made captive, as raids and war were undertaken to increase the number of slaves in one's possession. In addition, too, the moist scalp must be carried at the end of a pole, and kept some distance from the hogan until the effects of the sight of blood might be removed by the war dance (*anáji jintěsh*), after which the spear or belt was decorated with them. In the event of the death of a warrior from wounds received in actual combat, the captives made by him were killed over his grave.

Among neighboring tribes, the Utes, Apache (White Mountain), Mescalero and Comanche Indians were most dreaded enemies.

WORDS

nashbá' (*nsébā*, *údeshbā'*),
I go to war, I go to raid.

hashkhěji, the war chief.

yéikě, or *yéihastqínikě*, the
war rites and songs.

yīsná', booty, a captive.

yishné' (*sělnā'*, *deshnéł*), I
take booty, make a captive.

shidīlně', (*sidisnā'*, *shidīdol-
néł*), I was made captive by
him.

hatsízis qash'á (*qá'á*, *qadesh'-
áł*), I scalp an enemy.

tsízis ditlé, the fresh scalp.

náltqé, a slave.

naltqé sēlī, I become, or
was made a slave.

naltqé ishlé (*sēlī*, *deshléł*),
I make a slave of him, I cap-
tured him.

nāl'ái ishlé (*sēlī*, *deshléł*), I
make him slave.

báyodzīn ishlé, I make a
Paiute of him, reduce him to
slavery.

báyodzīn, Paiute, is also
used to designate slave.

atqěěsh'í' (*nt'áé*), I chastise
him (a slave).

atqīnsh'í' (*nt'áé*), or *atqīnshlé*
(*atqīnishlá*, *atqīndeshlíł*), I
punish you.

atqěěshlé (*atqī'íshlá*, *atqí-
deshlíł*), I chastise him.

FEUDS

Quarrels among neighbors and members of different clans are common. An amicable settlement is often reached privately and by representative members of the disputing clans. In some instances a case may be submitted to a neutral party, as is now frequently done before the board of Indian judges established by the Department of Indian Affairs, though an unofficial settlement is much preferred.

The Navaho exact a life for a life, and in the case of a murder the relatives and clansmen of the deceased exact the penalty. Formerly this penalty was most arbitrary, the price exacted consisting of almost the entire wealth of shells, stones, earrings, hides of lynx and otter, etc., of the offending clan. Later, horses and cattle were exacted, and a penalty to the value of five and more horses for a woman, and three or four for a murdered man, was levied upon the offender. At present this crime is equalized on a similar basis or the offenders turned over to the State authorities. Still it is by no means of frequent occurrence, and the position of the wife (taken from an outside clan) is one of comparative security, which in no small degree is due to the severity with which justice is visited upon an offender. Other crimes, such as rape, adultery, deliberate slaughter, or purloining of cattle, and damage to another's property, are often the occasion of strife and contention, resulting in hard words, blows and bodily injury. Drunkenness, unless carried on habitually, is regarded lightly. Offenses given in drunkenness are not taken seriously as a rule, and damages done are repaired or paid with admirable equanimity.

For neighboring tribes, such as the Zuñi and Hopi, the Navaho cherish a sense of natural superiority in addition to a traditional contempt for the latter tribe. The American, though not equal to the Navaho in rank, is respected according to deportment, while the Mexican, with few exceptions, comes in

for a considerable share of paternalism. Together with other tribes the Navaho share a genuine contempt for the negro.

List of words and phrases bearing on subjects of dispute, arbitration and crime.

ánaqui'áhi, a judge, Indian and American.

do ál'ída (it isn't done), it is forbidden, against the law. The word law or laws has no equivalent in Navaho and is paraphrased by some such expression as this, or by words like tell, command, Washington or the agent says, etc.

sháyá'ndót'í, I'll place it before a judge or arbiter, bring it to court.

naqaásht'éyodlí, he will settle it for us.

shāāsht'éyodlí, he will settle, arbitrate for me.

dodá dishní, I oppose it.

dodá dīdoní ut'é, he would have opposed.

tsídesyís, I am frightened, alarmed.

tsíďōlyis, he is alarmed.

bizé tōōqóyūi (much mouth), he is agape, amazed, greatly surprised.

āyohóshlí, I have a suspicion, I suspect.

hayúhoshlí. I suspect him of.

shayóhōjólí, he suspects me.

ayūit'égo ayóholí, a very suspicious person, he looks very much askance.

bahági idáshishdoní nfzin ayóholí, he suspects others of wishing him injury.

biyochíd, he lies, or biochíd, it's a lie, he lies.

algháhōdēt'á, an argument.

do-baghāhodet'áni, there is no question about it; also used for I argue.

biyochíd bebénłkhāgi tqohé bādzt'é', caught in a lie the sweat ran down his face.

chígo dādāghál, he couldn't see straight.

binfāgo dālichí (self), his face reddened, he blushed visibly.

yāhodílt'é', he was arrested.

awālyā setqí, and put in jail.

bahági it'ei yínædlí, he is bent on meanness.

bahági, or bighahági insht'é', I am mean, commit an offense, inflict injury.

qainéksihí, an unreasonable person.

doyá deinúzín, he is war-like, quarrelsome.

do-kehodóshné't'éda, an implacable person.

aqídiyætí, they avoid each other, do not look at one another.

alkédí'ni, we hate each other.

aqíjolá, he hates another.

hakídítá, he accused him of something.

olchíd, he works against another, he is jealous of him, sneaking.

akís achíshdilká', he alienated a friend.

ayúit'ægo aintí', backbiting, evil speaking.

ayúit'ægo dádsāgi hālní', he spreads false reports.

tōōqólníli hālní', he makes up false reports.

dābí oyíligi tōqoníli hālní', his reports are his own make-up.

āqólní tēyá naghá (he goes only for something to happen), an agitator.

ayúit'ægo atqá' nahalní', a tale-bearer, who causes hard feelings among friends by his gossip.

ayúit'ægo asæzín ādzín, he who "breaks his neck" to report something.

dótso, a gossip, tale-bearer (lit. a big fly).

dobinál hadsódzī it'éda (one can not speak in his presence), untrustworthy.

do-bilhojólní' it'éda, he can not keep a secret, or confidence.

la atśá bitqél náhodlél (it takes a different front), a conflicting report or tale, ambiguous.

dahazhó má'ikē naghá, there's a sample of a coyote! untrustworthy.

kād æ hashní', (I'll speak or am ready to speak now), I am anxious for news.

tā bæhozíni, it is apparent, he is candid, upright.

do-shilbæhózinda, ambiguous, doubtful, unreliable; also used for suddenly disappearing.

do chí'áda, he does not appreciate, unappreciative.

nanshtqín, I advise.

binántqín doyashóda, the advice is foolish.

tālgisi ntsíkhæs, he gives much thought to a subject, a deep thinker.

yīnā'sād benántqīn (life's words with I advise), my advice is based on experience, good advice.

bīnīndšīl, he has nerve, backbone.

bāhozhó, agreeable in manner, or yāhotě', agreeable; also used of being satisfactory to both disputing parties.

bāhashnī', I praise, admire him.

dōdā yækídasetqf, he is non-committal.

bāqūntī', he is accomodating.

do tsīl ādīl'ida, he is not hasty, but weighs the matter well. Also, he takes it easy.

aqīnsīn, I agree with, am of the same opinion.

do shīl'ān'ida, I do not admit that.

dahadsīgi, his answer, which is used to express abiding by another's decision.

bīdiyēshťf, I am prejudiced against him.

tāigisi beedilá, he talks or does big, a stuck up person, "too smart."

do bi'l'ida, very arbitrary, assuming in manner.

ayúinshtě nízīn, he gives himself airs, blustering person.

boholfigi tāigisi beedilá, a domineering person, one who "rides the high horse."

bādīlēhál, a babbler, noisy, boisterous fellow.

baátě' huló, he is mean (also used of an unruly horse).

tāyisi baátě' ādīn, he is kind, of an even temper.

yichī' nāóshdlī', I have a presentiment, anticipate trouble.

tōdishnī (tō ndishnī), I merely remarked, I was fooling.

do hotěgo ādisíntšā', you misunderstood me, a misunderstanding.

bi'l'iqēhūnsīn, I inform him, acquaint him of; also, I am acquainted with.

do-joodllá'etáda, he is unreliable, a prevaricator, it looks suspicious.

shīkajīlqf, he pumped me.

béekāiyīl, he pumps others, making a practice of pumping others.

akédinī, dislike, he dislikes, hates him.

biké āqidishá (go around him), I avoid him.

yá' nihish'á, I intimidate you.

nił yáhashlē, I frighten, intimidate you.

ahúshndēl, rape, I rape.

nił únishdēl, I rape you.

yiyisqí, he killed, an assassin, a murder.

ádádāhāshtá', I commit a crime.

adishlē, I commit adultery.

nadishlē, I commit adultery with you.

kénsin, I am jealous of.

yāhásin, shame.

bayánizí, ashamed, he is ashamed.

bayáznísin, I am ashamed of myself.

kenásh'ně (kēnásdsā), I avenge, get even.

ké naasdlí, I have apologized, made friends again.

t'ó shíłhazkhé, I am in doubt, not clear as to the course to be taken.

nish ishjéish dolá? (ishjé, pasted, glued to), do you doubt my friendship?

hozhóji jilf, he has made friends again; also, he is (now) peaceable.

kehésdōd, straightened out, a compromise was made.

bídīl'á, he is undecided.

t'ádo bāhozíni, there is no clue to the deed.

yāāhalyá, he is careful, discreet.

bāāhashyá (nt'é), I am careful.

bāaholyá, have care!

do-dāāhalyáda, he is very careless.

shíshikě (nt'é), I don't care, it is immaterial to me!

bainéshtî (ba'nsístîd, ba'ndeshtîl), I get him into trouble.

nainéshtî (nā'nsístîd, nā'ndeshtîl), I make difficulties for him.

qayá' qodisqés (qayá' qodélqíz, qayá' qodidésqís), I run the bluff on him.

niyá' qodisqés (qodélqíz, qodidésqís), I run the bluff on you.

t'ó bāhodoní, he does not worry over it.

t'ó shāhodoní (nt'é), it does not worry me.

t'ó bādeshní (nt'é), I do not worry for it.

dohalyáda, he is childish.

t'ō dóōhalyáda, or t'ō bíní ádin, he has no brains.

t'ó shíł qóyē, I am alarmed, frightened.

łídíshchí' (łidishchí, łídíshchil), I coax him.

łakhán dishní (díníd, łakhán dideshníł), talk sweet, sugared words; I coax, for instance, a prisoner, or horse.

łakhán didínił, you must use nicer language than heretofore.

yā'inił, one who arrests, the modern deputy sheriff.

khéndzín, or kheshó'ní (nt'é), I am his friend, I asso-

ciate with him.

bizēqólě' laná nsín, I am anxious to see him die, one who awaits with impatience the death of another.

tsín, a club.

nánshqāl (nanéłqāl, ndíneshqāl), I strike with a club.

nánnshqāl (nannéłqāl, ndíneshqāl), I beat you with a club.

SWEARING

The Navaho swears when angry or excited, and at a turn of fortune. Abuse is heaped upon a horse, a dunce, or an intruding dog, and the like. Women are just as bristling and voluble as the men, if not more so, and use the same delicious and forceful language. As a rule, however, the child is not abused, but treated with all gentleness and utmost leniency, and the affection of some grown men and women for their parents is truly touching.

Navaho imprecations are harmless expressions and usually refer to things tabooed. Delightful imitations of American explosives are not infrequent, such as: "Ssū! Hod dem gid æ!" or, "you dan sun de bid!", though many are unaware of their meaning.

WORDS

shāsh, shāsh (bear); tlīsh, tlīsh (snake); mât'i, mât'i (coyote), or similar imprecations, often precede a long line of vigorous language.

shāsh khéyadé, from the bear's den!

shāsh bakhá'i, you male bear!

shāsh bá'ád, you female bear!

shāsh baálchíni, you bear's children!

jishchádā, disinterred!

jishchádā mǎ'i, you disinterred coyote!

nǐ, added to the name or malediction, is equivalent to our damned.

mǎ'i nǐ, you damned coyote!

chīnditqádā mǎ'i bisgâ, from the nether world dried coyote!

chīndash, go to h—!

chīnditqâgo, with a similar meaning.

chīndi, chīndi, ghost, or carcass!

dǎdzāgo diní, you have your nerve to say.

tsíčkě, get out, you talk like a fool!

dǎdo (tǎdo) ántǐni, stop!

tǎdo diníni, don't say that, don't talk so!

bił hodijóli, you blockhead!

dǎdo biniyéhego bănahăchf, he makes much ado (fuss) about nothing.

bizahôchf (sizahôchf, I swear), he is abusive, swears.

do-biłilfda, is also used for abusive.

qó'íd, I cursed him, abuse.

qűesdsí, I cursed him for good.

yǎ'qűesdsí, I cursed him "up," or "right and left."

shfíd, abuse.

hashhshkhé, I am angry.

hashkhé, angry.

ashgêsh (ntǎé), I gnash my teeth.

yīnsdzí, I abuse him.

yǎesdzí, I abused him.

sǎdzí, I have abused.

yish'f (ntǎé, or sé'íd, desh'f), I swear at.

tłish bizéde, out of the mouth of a snake, or, you ex- pectoration of a snake! shăsh (bear), mǎ'i (coyote), léchâ'i (dog), are used in a similar manner, as also chīndi bizéde, you spittle of a ghost or car- cass! tqǎ'î bizéde, you cast- out of poverty! dichín bizéde, you castout of hunger!

Similarly, tqǎ'î khéyă'dǎé, you are surely an apparition from the land of poverty! dichín khéyă'dǎé, from the land of hunger! tłish khéyă'- dǎé, from the land of the snakes! chīndi khéyă'dǎé, from the land of the departed! also that of the bear, dogs or coyote.

Another variation is: tłish bizédéigi, you're just like the spittle of a snake, or a coyote, bear, dog, ghost, etc.

shāsh bizē gūnē' anā, get
into the mouth of a bear,
(snake, coyote, etc.)

Or, interrogatory, as:
lechāi bizē gūnā'ish do anā'da,
why don't you crawl into the
mouth of a dog, etc.

chīnditqāđǎ'igi, like one

from the nether worlds, like
a d——!

chīnditqāgo dinā, or dināl,
go to h——!

itsā'hunfīgi, or itsā'ho-
chīndi, or itsā'hoshkhāfīgi,
cusswords, abuse, imprecations.

MARRIAGE AND BIRTH CUSTOMS

At the age of nubility a ceremony is conducted for the maiden which in substance consists in pressing and molding her body. This completed, the women bathe her body, after which she is told to run toward the east and back to the hogan again, where the bath is repeated, her hair is combed, and her body is spotted with white clay (dlēsh) from nāsēlā. The two songs accompanying the run to the east, and the spotting with clay, are essential to the ceremony, and are taken from the rite of blessing (hozhōji). Recently the eating of the corncake (alkhād) has been added. Should marriage precede the nubility ceremony, as it sometimes does, the ceremony is then performed after the first menstruation.

A youth desiring a maiden in marriage asks another (usually his uncle or close relative, or, if an outsider, some friend of prominence) to intercede for him with the parents of the girl. This party, accompanied by the father or mother of the boy, visit the girl's parents, and after due explanations have been exchanged, offer the customary gift (i'fīlī). This gift is usually in the shape of from ten to fifteen horses or their equivalent, or in proportion to the wealth and social standing of both families. It is not the price paid for the girl, but a gift sanctioned by tradition, as the Navaho do not sell their children. Formerly, ten horses were considered a proper gift, and a gift of twelve horses, introduced later, was prohibited (bahādzīd) for religious

reasons. At present the poorer classes offer as little as one and two horses.

When the gift or *igé* has been decided upon a date is set at which the family of the bridegroom will appear at the hogan of his bride (say after five or ten days). Navaho decorum does not permit of visits to the betrothed, nor is it in accord with good taste to look upon or show familiarity with the mother of the girl asked in marriage. Hence the social taboo placed upon the husband and his mother-in-law, who is therefor called *do-yo'fni*, she who may not be seen.

In families of some means the most elaborate preparations are made for a suitable festivity; the boy's folks gather the horses and stipulated gifts, while the girl's people prepare the meats and all things required at the wedding. Toward evening of the appointed day the party of the bridegroom arrive with the horses and gifts at the hogan of the bride, and both bride and bridegroom are dressed, according to means, in their best clothes, and decorated with beads and silverware. (The old custom of placing a buckskin, or the skin of a wildcat, upon the bride, of which she was deprived by the youth's parents upon her entry into the hogan, has now disappeared.)

The bridegroom is first to enter the hogan, which he does by proceeding around the south side of the fire to the northwest side, where he is seated upon blankets spread there for the couple. Presently the father or uncle of the bride conducts her to his side over the same ritual course (*shábiķé*), and she is seated to the right of the bridegroom, slightly to the rear of him. Friends and relatives now file in and seat themselves on either side. At the hogan they find all in readiness for a good meal, as well as a small jar with water (*tqóshjē yázhi*) and a gourd ladle (*ádé'*) for the washing. The women, too, have prepared a plain cornmeal gruel (*tqá'níl gád ádín*, no cedar porridge) in a new basket, or one which has not served a ceremonial purpose. This they place before the couple with the closed seam (*bidá ástlóni*) pointing eastward. Upon this gruel the father

of the bride now draws a line with pollen of white corn (*nadálgai bitqáldidín*) from the closed seam in the east to the west end of the basket and back again to the east, and another line crossing this with pollen of yellow corn (*nadáltsoi bitqáldidín*) from south to north and back to south again. Finally, he draws a circle with the yellow pollen around the whole, beginning at the closed seam in the east, and also completing the circle there. Thereupon he places the ladle and water jar before the bride who dips water with the ladle and pours it over the bridegroom's hands while he washes them (*hála tqádsigís*), and he then performs a like office for her. The basket with gruel is now turned toward them so that the closed seam faces the couple. The bridegroom then takes a pinch of the porridge with his fingers just where the line of pollen touches the circle of the east side. He eats this one pinch, and the bride dips with her fingers from the same place. He then takes in succession a pinch from the south, west and north sides, where the lines of pollen touch the circle, the bride's fingers following his. This practically concludes the marriage ceremony, and now a general summons to eat is given to the guests. Subsequent to the meal (or the eating of the porridge) general satisfaction is displayed by rubbing one's limbs with the hands and accompanying this action by some known invocation to *esdzânádle*, the Sun, Moon, She- and He-Rains, and the divinities in general. This is followed by expressions of rejoicing at the happy event, and of good and sound advice to the newlyweds.

It is optional with the married couple to consume the contents of the basket or to join in the general feasting. As the gruel is passed to the visiting guests when the couple so desires custom gradually introduced two methods of deciding the ownership of the basket. The more conservative opinion assigns the basket to the bride's mother (who, of course, can not be present), inasmuch as she parts with her own flesh and blood. The other grants it to the bridegroom's parents, and by mutual agreement he who drove up the horses always consumed the last portion of

the porridge, and eventually presents the basket to the boy's parents. He is therefor said to win the basket, and some designate a basket thus obtained as *tšä' naobáni*, the basket won (at the wedding).

Henceforth the taboo between husband and mother-in-law is strictly observed, and friends and neighbors assiduously assist in guarding this injunction. In the absence of the husband the mother pays her daughter an occasional visit, and in general the wife is not subject to maltreatment owing to the interest shown her by clansmen and relatives. The ancient custom by which brothers-in-law deprived a husband at will of wife, property and home, is at present on the wane.

Marriage between cousins and close relatives, or between members of clans related to one another, are not viewed favorably, and are prohibited by the more conservative clans. (Cf. Gentile system.) To obviate dissension and to insure conjugal fidelity recourse is had to marriage with the sisters of one's wife, a course which is favorably viewed by the wife's parents if the son-in-law prove industrious and decent otherwise. In this event, however, the marriage ceremony may not take place, but the second and third wives are added to the first without ceremony (*banáholtqě*, she is given to him in addition to the other, a wife's sister). Others seemingly avoid the taboo placed upon the mother-in-law by marrying the widow or divorced woman, and adding her daughters as wives in due course of time. This, too, is done without the ceremony, which can only be had for a virgin, though a divorced man may readily repeat it. The so-called *chěná'i*, or privilege of marrying the sister of a deceased wife, was also conceded to the widow in regard to the brothers of her late husband, and many are still faithful to this custom.

Divorce is readily obtained, with or without mutual consent, and is often due to interference on the part of clansmen and relatives as above mentioned, but also to mutual infidelity, as adultery is anything but uncommon. (Frequent recurrence of divorce on the part of the wife, and subsequent fourth, or even

second marriage, is akin to prostitution.) No financial difficulties are involved in the separation as the property line is strictly drawn and each party has its own property. The children belong to the mother, whose relatives frequently take possession of them in early youth unless otherwise stipulated.

Virginity and celibacy are not practiced. Adultery, it is said, was punished by the early Navaho with amputation of the ear, eye or nose (after the manner of the Apache), while, originally, amputation of the breasts and vagina was inflicted, but proved too fatal to be continued. With the advent of the American like customs were eliminated, and at present retaliation or divorce seem to be the only measures taken by the offended party. A heavy fine of horses and cattle is levied upon the crime of rape, and is always exacted by the relatives (clansmen) of the victim. Modern vices, like abortion, race suicide, and infanticide, are not very common with them, indeed, a steady increase of issue is most desirable with the greater portion of the Navaho.

During the period of pregnancy the husband seeks divine aid through occasional performances of the rite of blessing (*hózhóji*), and both husband and wife carefully avoid the sight of blood by violence. The birth of a child is the occasion of a joyful gathering of friends and neighbors. A singer is called upon to assist with select songs of blessing (*hózhóji*), but does not act as accoucheur, as assistance, if needed, is rendered by female neighbors. The laboring woman is placed in a sitting position, and is supported by means of a stout cord suspended from one of the beams, and passed under her arms and about her waist. Hence the popular reference to the suspended cord when speaking of childbirth. The event is heralded with much taunting and joking between men and women, and the advent of twins is always a source of genuine pride and elation on the part of the parents, who accept of them as a signal distinction of divine favor, and designate them as such (*diyín qāändél*, a double divine gift). Subsequently every effort is made to preserve their lives, and the ceremonies are even more frequently invoked than after

the birth of a single child. Consequently it is untrue that the Navaho dispatch one of twins. (Apropos of this, the event of twin colts is viewed as an evil omen, qondz'ingo it'ě, and both mare and colts are killed. Not so with the goat, cow or sheep.)

A properly born child which gives no sign of life by sound or crying (do-hadz'igi, voiceless) is not recognized by its parents as belonging to the living (nahokhá din'ě'ě); consequently it is quickly deposited in the branches of a tree pointing northward (náhokhōsji nāhos'ěl) and left there. This is done most frequently at premature births (qá'ěl), which occasionally occur, as in that event the fetus shows little or no life. In either event, however, when the infant has given signs of life by crying or sound (hadz'igi) it is immediately recognized by the parents (da qó, it is theirs), and subsequent death is always followed by the four days' mourning, and the child is put away like any other mortal. (Cf. Navaho Cradles and Mortuary Customs.) A repetition of premature births portends evil and necessitates purification of the mother's womb through the witch chant (hochōji).

The mother always suckles her child, and nurses performing this office are extremely uncommon.

WORDS REFERRING TO MARRIAGE AND BIRTH

dzíłkhá, a youth.

jíłkhá, a maiden.

khá ád'ini, a virgin (one who has no husband), which is also used to designate a widow.

ba'ád ád'ini, designates a widower. Usually widowers are designated as bizhá naghá, going alone.

khināldá (khināsdá, khin-doldá), or khinjildá' (khin-dsīsdá, khinzhdoldá), the first menses.

chōy'ın, designates the menses or menstruation thereafter.

khinasdā usually indicates the performance of the nubile ceremony.

igyé (asgyé, adogyé), the marriage (derived from ishqé (aséyě, adeshqé), I marry.

ná'ishqé (naséyě, nadeshqé), I marry you.

danákhâ, the nuptial dish.

danákhān dādidīf (lit. let us eat the porridge), let us attend the nuptials.

tsābī tqādidīn aľnāōsnīl (lit. the pollen is crossed in the basket), the porridge is ready.

tqadidīn bīdzīłtsē (bīdzīłtsē, bīzdołtsā), (lit. the pollen porridge is eaten), the nuptial ceremony is taking place.

bitsīs, her limbs and body.

askās (íkās, adeskās), I mold or straighten the limbs, which is performed by women.

osh'īl (f'īl, idēsh'īl), copulam habere.

adishlē (adīla, adeshlēl, or adideshlēl), I commit adultery.

do-ałchīda, she is barren.

yīstśā, conception, or, sometimes, awé shidī'né, birth is approaching.

awé qansód (qanfyōd, qadīnesōl), I conduct the birth ceremony, or, attend it. This term also indicates a woman in childbirth.

tłol nātī', the hanging cord, or tłol nāt'ē', the cord is fastened around her, or sīs nāt'ē', the girdle put around her, terms which are used to designate the approach of birth. Hence, the woman is in labor.

kād'áe inilchī, she is now confined.

ashchī' (ashēłchī, adeshchīl), I give birth to a child.

awé qátłzh, or simply qátłzh (lit. fell out), the child was born.

awé biyalaí, the placenta.

ajishchīgo t'ó dsístqí, the afterpain.

shīłt'ó' (shīłt'ód, shídołt'ól), I give suck to a child.

ādisht'ód (adésht'ód, ādī-desht'ól), I wean a child.

shiyázh, my little one, my child.

shiyé', my son.

sitsí', my daughter.

shaālchīni, my children.

nakhishchīn, twins.

hastqín ostsédi, the first man; hastqín akhéde, the next man, in case of twin boys.

atsé ishchīni, the first born, and akhéde ishchīni, the second born, in case of twin girls.

yółqā'ashkhi, a bastard.

bayásīn, shame, shameful.

bayánsīn (bayánīzī, bayā-dīnesīl), I have some shame, or I am ashamed.

oní sá'ā, or oní dēyá, he is jealous.

nāghahunshtqé (nāghahunishtqí, nāghahodeshtqél), I win your wife's affections.

nchú'i (shi nchú'i), my dolkól, or siskód, squeeze!
property. take care! (said to children).

MORTUARY CUSTOMS

The observance of the traditional customs at the burial of a Navaho devolves upon two or four mourners, of whom one is a near relative or clansman, while the others are taken from affiliated clans, such as that of the father, wife or husband of the deceased. In the early days one or more slaves, according to the wealth of the deceased, were forced to accompany the corpse, and were killed over the grave and left. In deference to the twelve chiefs of the tribe the number of mourners was set at twelve, though at present the usual number is four and less.

The mourners appoint one of their number master of ceremonies, whose duty it is to guard over the exact observance of all traditional customs. He then directs one of the four to select a site for interment, which ordinarily is a crevice of a rock, or some secluded spot on the mountain side offering ample facilities for covering the corpse securely and quickly.

Previously to entering the hogan, or approaching the spot where the corpse lay, the mourners must disrobe to the breech-cloth and untie their hair, to avoid contamination with a dead person. They then bathe the corpse thoroughly, and clothe it as for a festive occasion. The face is painted, the hair dressed, new garments and calicoes are purchased, belts, rings, bracelets, and other silver ornaments, are nicely polished, the beads are washed, buffalo robes, rugs, blankets, and any other valuable possession of the deceased, are made ready to be deposited in the grave with the corpse. This insures the deceased a kind reception in the nether world.

The corpse is then transferred to the place of interment. The burden, wrapped in a blanket, was placed on the shoulders of two slaves, while at present it is carried by the mourners

unless other arrangements can be made with outsiders, which is preferred in every instance. During the procession any chance traveler is hailed and warned of the presence of a corpse. One of the mourners usually gives the signal by presenting his back to the traveler and facing the procession, meanwhile beckoning with his hands over his shoulder to change the course of his journey. The desired effect is always obtained. The procession proceeds in silence. The mourners should not indulge in unnecessary conversation, they should not expectorate, nor turn in the direction traversed by the corpse, but complete a circle before proceeding. They must use the utmost care not to turn a stone on its side, but replace it immediately to its former position, as any offense against these traditions may be visited by subsequent and sudden death.

The position which the corpse should take in the grave is a mooted question. Some would have it that the corpse be laid on its side with the head in the north and facing west, whence the Navaho originated. Others place this origin in the north, wherefore the corpse faces north with the head in the east. Others, in recent times, pay no attention to such disputes. Once in position, the corpse is decorated and covered with beads, belts, silverware, blankets and rugs, over which a generous layer of dirt, sticks and stone is built to protect it from disturbance by wild animals. Usually these services were performed by slaves, who were dispatched after completing their work, so that their master might enjoy their services in the world beyond. The burial completed, shovels, spades, mattocks, or any tool used in the work, are broken and thrown upon the grave where they are left and never touched again. The mourners then complete a circle and return to the family in skip and hop fashion, carefully avoiding all contact with brush or cactus, as this might delay the spirit in its flight to the other world.

On reentering the hogan they bathe their bodies again, and now remain in mourning for four consecutive days with the family of the deceased. The family, which has been fasting

since the demise, is now allowed to take food and drink. This fast, by the way, extends even to babes, who are not given suck until after the return of the burial party. If this be unusually delayed wood ashes is applied to the face of the child, or rather to its forehead, before giving it suck, which will guard it against the malice of the dead. On the whole, a prompt and early burial is desirable, both to rid the family of the danger of contamination, as well as to terminate the fast as early as possible. The fast and mourning are not obligatory with the family member who has not been present at the death and has not viewed the corpse. Hence, it is permissible upon notice of a death not to approach the scene in order to evade this obligation.

The four days of mourning begin with the night following the demise, or with the very night in which it occurred. In deference to the spirit of the deceased the mourners and family abstain from unnecessary conversation, from their usual sports, from travel and labor. They arise at dawn, and leave the hogan only when necessity compels them, but always in company of the master of ceremonies. Moreover, the sentry on guard, by the usual signal, keeps the *death line*, or the path from the hogan to the grave, open during these four days, in which the spirit of the deceased makes its journey to the lower worlds. But on the morning following the fourth night the mourners again bathe themselves, all members of the family imitating their example. After a brief mourning and wailing the ceremony is concluded, and the deceased is nothing more than a spirit, whose influence is to be dreaded.

In most instances care is taken to remove the dying from the hogan. In the event, however, of a death within a hogan, the east side, or doorway, is closed, and an opening is made in the north side through which the corpse is carried out for burial. The hogan is then burnt and leveled to the ground, while the earthen pots used in cleaning the corpse, or cooking utensils, are broken there and then. Ordinarily, too, the finest riding animal in possession of the late owner is saddled near the grave and

killed and left to rot. Formerly the animal was strangled and then killed, while at present it is shot. Saddles and blankets, too, were formerly left to decay, while at present the precaution is taken to break and cut them to pieces.

Mourning was prohibited in the case of a warrior dying from the effects of wounds received in actual warfare, owing to the belief that death might overtake the mourners in a similar manner. The warrior retains his rank and prowess even in the nether worlds. The fallen foe is his slave, who must serve him beyond, hence they were buried near by, so that the spirits below might recognize them as such. On the other hand, weapons and the shield were scrupulously barred from the grave, as they might intimidate those spirits, whereas an unarmed warrior is readily enlisted in the rank and file of that army. Hence, knives, arrow-points, and everything suggestive of a weapon, is removed from the ornaments and barred from the grave even to-day.

Good custom also required a lapse of ten to twenty days before a division of the property of the deceased was made. This, as well as some of the customs above described, are not always observed.

WORDS REFERRING TÔ BURIAL

dsístqí, that which lies there, the corpse.

chĩndi sètqí, is used, probably of an unidentified corpse.

yō'ílá'i (yoída'ilá'i), he who puts it aside, the mourner.

yōě'élne', where it is put away, the grave.

jishchá, the grave.

nchúigi, or nalyéhe, the goods or ware put into the grave.

do-ădăda, they do not eat, the fast.

dahosdĩsin, they have regard or respect.

hokě', the burnt ruins (of hogan).

chĩndi, a spirit.

chĩnditqă', the lower world, world of spirits.

yīhahá! chĩndi! behold! a vessel (pot, etc.) of a spirit!

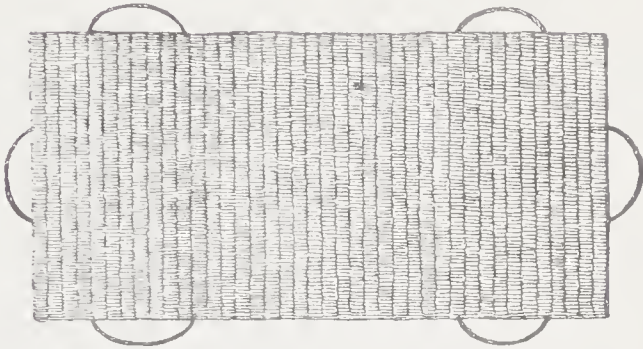
bizějitqí, it (the horse) is strangled.

biłnijłnī, it is struck (with a stone, etc.)

chĩndi lěsh behalkhádi, a broken burial shovel.

NAVAHO COSTUME

The earliest Navaho costume was very meager and constructed of yucca and grass fiber. To obtain the pith the yucca leaves were boiled and pounded with a stone, then twisted and braided with mountain grass for such fabrics as the roof of the house, the mat for bedding, the leggings, shoes, and the blanket. This



Yucca Blanket

yucca blanket was occasionally braided with rabbit fur and, as a rule, provided with handles of braided yucca on the sides and ends to better enable one in drawing it close to the body.

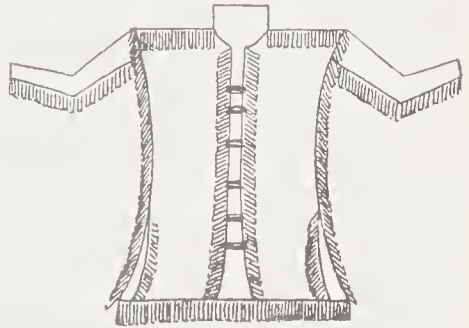
tsází, yucca.

tló' beéldládi yistló', the blanket woven of grass.

bitqádádeshbízh, braided at intervals.

gǎ' chídi, rabbit fur robe.

Subsequently, more substantial buckskin suits were substituted for the yucca fabric, though the buckskin suit was expensive, as well tanned skins were bartered from the Utes. The accompanying illustration shows a buckskin shirt with fringes along the front, the



Buckskin Shirt.

shoulders and sleeves, as well as the sides and lower end of the shirt, which was worn over the pants. Buckskin or sinew was used as thread, while the fringes were cut after sewing the strips into the seams. Thongs, which were eventually displaced by brass buttons obtained from the Utes, were used in fastening the shirt in front. These shirts were either gray or the natural color of buckskin, or dyed yellow and red.

With the introduction of wool and weaving the blue and red striped shirts illustrated on page 248 were added to the men's apparel.

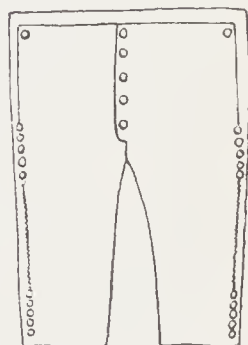
Another shirt which, like the preceding, was originally borrowed from the Pueblo, was still in vogue not so very many years ago. It was woven of wool yarn in the shape of a woman's dress, but provided with a longitudinal slit in the center for the purpose of passing it over the head. It was entirely black in color and the only decoration was a tassel in each corner. When too filthy it could be washed and redyed, and from its varied use in wearing it either side out, or turning the front to rear at will, it was called *æ náhot'áli*, or *bíl lizhín æ náhot'áli*, the black dress shirt which may be worn either side up. As the surface of the shirt was very rough (*ditšíd*), which it was impossible to obviate even by a loose weave (*ilzhóligo istlód*), a fur collar made of wild-cat skin (*noshdúi bakhági*) was added and tied with buckskin thongs. The front sides of the shirt were folded inwardly and overlapped by the rear, in which fashion it was held close to the body by means of a cord tied around the waist. Despite this precaution the wind had free access to it, wherefore the more humorous dubbed it *æ ákídanālkí*, or the shirt which flaps in the wind. It was worn in addition to and over the ordinary wool or calico shirt, and some did not despise to store it away (*índa-sistsōs*) for festive occasions. At present it has disappeared entirely.

The so-called big shirt was made of four-ply buckskin glued with pitch, and was impenetrable to the thrust of spear or arrow.

It was used by some in actual warfare, which is true also of the so-called helmet used in covering the entire head.

ăbáni ě, a buckskin shirt.	yō nčhín ětsóigi, brass buttons.
tsăg, the fringe.	ă tso, the big shirt.
tsăgai, the bone awl used in sewing.	do baghăiltōda, impenetrable.
năshkhăd (năsêlkhăd, údesh-khăł), I sew.	člăhadîlkhădi, the helmet.

Buckskin pants were made to match the color of the shirt. The short pattern illustrated here reached just below the kneecap and was provided with brass buttons in front, along the outer seam of the leg, and one on either side at the hip. The inner leg only, and a small strip on the outer portion of the leg, were sewed, but no fringes added. The pants were buttoned first in front, then along the knees, and finally at the hips. It is said that seven days were required in which to finish one pair, so that buckskin suits are now rarely made. Occasionally breeches covering the entire length of the leg, and decorated with fringes, were worn.



Buckskin Pants

ăbáni tľajĭ ě, buckskin pants.
hădîlzhĭ (covering the entire leg), buckskin breeches.



Buckskin Belt

The buckskin belt worn over the short pants consisted of two pieces of buckskin sewed together so as to leave an opening in

which to carry flint, medicine, tobacco, and such trifles. It was decorated with fringes along both seams, and fastened by means of four thongs provided at the ends.

sīs lă āzē (the belt complete), the buckskin belt.

The frail yucca leggings, too, were displaced by those of buckskin, which were wrapped about the leg and secured with the buckskin legging cord. Eventually the garter of yarn took the place of the latter, while the fringes along the seam of the legging, too, have disappeared.

The early buckskin breechcloth has now been displaced by one of goat hide and ordinary manta. It is worn continuously by the men, just as the waistcloth is worn by the women. The blanket and moccasin have been mentioned elsewhere.

tl'ō' yistlē, yucca leggings.

jā nézhi, the garter.

ābāni yistlē, buckskin leg-
gings.

tlēstsós, the breechcloth.

yistlē tl'ōl, legging cord.

tlákhāl, the waistcloth (of
women).

Women clothed themselves with the blanket dress, which was fastened with the sash, and later added the shawls. In journeying, moccasins with long uppers, and foot-wraps of buckskin, were used. Children's clothes, whenever supplied, did not differ except in size. Mittens for all were made of wildcat skin.

esdzán dabi'ā, women's
clothes.

esdzán bizís, the sash.

alchín dabi'ā, children's
clothes.

khě bikídesdīsi, foot wrap
(leggings).

bīl, woman's dress.

lájīsh, mitten.

nashdūi, wildcat.

THE HEADGEAR.—Helmet shaped caps were worn by warriors on raids and journeys, and hung up outside upon their return, as good custom forbade the use of the hat inside the hogan. They were made of buckskin, though some clans preferred

mountain lion and wildcat skins, by which caps they were usually recognized. The cap was decorated with owl, turkey, crow, and eagle feathers, which hung loosely over the rear of the cap. The front was decorated with a strand of abalone shell (and bayeta) without which the cap was practically worthless. Caps were measured by the spread-out fingers, as the semi-circle thus described is equal to that obtained by placing both hands on the back of the head. The two semi-circles, of equal size, were sewed together so that the seam passed from ear to ear. The front was then cut to the shape of the forehead, and a series of holes punctured into the top and rear of the buckskin caps. The latter were also topped by a straight or curved peak made of twisted and hardened buckskin.



Figure 1.

Figure 1 illustrates the cap made of the head of a mountain lion; figure 2 that of the wildcat. Both were provided with a flap in the rear covering the neck, and were held in position by means of a chin cord of the same material as the cap. Two eagle feathers, set in a cluster of owl feathers, adorned the tip, and a strand of abalone shell the forehead. The caps distinguished the khīyā'āni clans.



Figure 2.

Figure 3 illustrates the whitish cap of buckskin, which derived its name from the curved peak of badger or mountain lion skin whitened with a mixture of almogen (dlēsh) and charcoal (t'ēsh). Two eagle feathers, set in a cluster of plushy owl feathers, hung loosely from the tip of this peak.



Figure 3.

Figure 4, the smooth cap of buckskin, was so called because it fitted the head closely and concealed the hair. The eagle feather, too, which hung over the flap in the rear, was not visible from a front view. A single peak of hardened buckskin adorned the top.

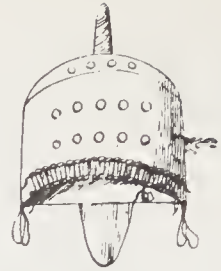


Figure 4

Figure 5 illustrates the pointed or forked cap, which was so called because of two peaks extending right and left. Two eagle feathers, nestling in a cluster of turkey and crow feathers, were secured between the two peaks, and a flap with fringed edges extended over the neck. The front extended slightly over the forehead, and the cap was held in position by means of a chin cord of buckskin.



Figure 5

Figure 6, the cap with opposite peaks, was similar to the preceding. The base of the peaks were set close together, while their tips were curved outwardly in opposite directions. Eagle and turkey feathers adorned this cap, which was also provided with earlaps.

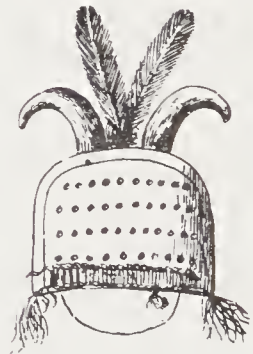


Figure 6

Figure 7, the feathered cap, was provided with a triangular peak decorated with eagle and turkey feathers. Between the punctured lines on the front and rear bayeta cloth and abalone shell were sewed, and the cap was secured below the chin by means of two buckskin thongs from either side.



Figure 7

Headbands made of beaver, muskrat, and otter skins, were highly prized as a head-gear, and profusely decorated with precious stones. These were a mark of wealth, while

the poorer class were satisfied with buckskin headbands. Women did not wear a headgear.

WORDS

- | | |
|---|--|
| chă', the hat, hatband. | găgi tsös, crow feathers. |
| nashdúitso chă', mountain lion cap (Fig. 1). | abáni baghâdeshgîzh, punctured buckskin. |
| nashdúibai, or nashdúi chă', wildcat cap (Fig. 2). | abáni bikîdesdîz do ntlîs, bucksin (twisted and hardened) peaks. |
| khîyă'âni chă', the cap of this clan. | abáni nahîltsôs, buckskin earlaps. |
| chă' ditlôî, the woolly cap. | hayayă ânântî', chin cord. |
| chă' bîdzîgai, the whitish cap (Fig. 3). | hatsîyâdæ, the flap in the rear. |
| chă' hodôlkhô', the smooth cap (Fig. 4). | yăgo îtsă nêhestăs, the fringed rear flap. |
| chă' halgîzh, the pronged cap (Fig. 5). | dîchîî sênîl, the abalone or haliotis band. |
| chă' âltsâdækhai, cap with opposite peaks (Fig. 6). | nākâlchî, bayeta. |
| chă' âtsôsi, the feathered cap (Fig. 7). | tqâbâstqîn chă', otter headband. |
| âtsă bitsē, eagle feathers. | tqâbă'mă'i chă', muskrat headband. |
| tqâzhi tsös, turkey feathers. | chă chă', beaver headband. |
| năëshjă tsös, owl feathers. | |

MODERN COSTUMES

The ancient national costume, especially that of the men, has about all but disappeared since their contact with white men and the advent of the trader among them. Scant remnants may still be found, such as the moccasin worn by both men, women and children, though the American boot and shoe has found favor with many. The old sash and the buckskin wraps, too, are still worn by many women, while a headband and the silver mounted

wrist-guard are worn by many men as a reminder of by-gone days. But, as the Navaho appears to-day, he may be sketched about as follows:

The hair is drawn smoothly to the back of the head by means of a whisk broom made of a bunch of mountain grass. Here it is done up into a compact club or queue and tied with a white woolen cord so as to give it the shape of an hour-glass. A bead or two of turquoise, or other shell, sometimes decorates the hair-



Hair Broom

cord. Quite a number now wear the hair cropped off in a straight line, about an inch below the ear. A red silk sash, or vari-colored kerchief, is worn as a turban about the forehead, and is often decorated with turquoise and silver ornaments. The broad-brimmed western hat, usually of black or gray color, has, however, displaced the headband to some extent.

They all have the lobes of their ears pierced, and from them are dangling ear-pendants, made either of a flat piece of polished turquoise, or a small string of thin disks of turquoise, or of good-sized silver rings, some of which have one or more loosely sliding beads strung upon them. These silver earrings are sometimes of a pretty generous size and weight, so that when riding they are often turned up over the auricle, as the jolting of the horse's gait cause them to jerk uncomfortably at the lobes. About their necks they wear strands of beads, either of coral, turquoise, or red, white and black stones and shells, or heavy necklaces of silver beads, and other ornaments of their own make.

The upper part of the body is covered by a short shirt of bright-colored calico, to which breeches of the same material, or manta, are added. Coats, vests and pants of American style and

make, especially corduroys, are not infrequent, and are worn over the loose breeches of light cloth. Belts, consisting of large silver disks of silver strung upon a strip of leather, are worn by both men and women, though the men usually girth themselves with a leather cartridge belt and sixshooter. Some of the older men, too, may often be seen with a leather bag strung over their shoulder and hanging over the left hip. This is used for small articles, such as matches, tobacco, pocketknife, and the like.

On their feet are low moccasins, dyed a dull reddish-brown or black, and soled with rawhide. Footless stockings, which leave the toes and forefoot free, are worn with the moccasins by many men, in addition to leather leggings, or leggings of buckskin, which are fastened below the knees with the garters or cord. In winter the foot and moccasin is protected by a kind of overshoe consisting of green sheep- or kidskins, which are secured to the foot with the woolly side turned in.

Though the bow and arrow, lance and shield, were formerly part of the costume of the Navaho warrior, the firearms which have now replaced them are but ornamental additions.

There is no difference in the summer and winter dress, and the blanket is worn summer and winter as a mantle. The more progressive Navaho do not disdain the white man's garb in all its details, and the Navaho in general take willingly to the white man's dress.

The women dress the hair like the men but never wear a headband. Their ears, too, are pierced, but they do not wear earrings. Beside their bead necklaces, which are like those of the men, they wear a number of silver bracelets, rings, etc. They wear long calico skirts, and use the same kind of shirt or tunic and robe as the men, though the latter are usually of brighter colors. About the waist is wound a long red sash, or the silver belt. The moccasin, too, is of the same shape like the men's, with slightly higher uppers. On festive occasions or journeys the moccasin is supplemented by the legging-wrap, consisting of

a buckskin wound in regular folds around the lower leg, from ankle to knee, where it is secured with pieces of buckskin.

The children are dressed about the same as the adults, only their garments are smaller in size, and often very scant.

WORDS

ā, a shirt, dress, clothes.
 ā tso, a coat, overcoat.
 t'āji'ā, pants.
 chalékho (Sp.), or da'ndish-
 d'ó'i, a vest.

khéndōtsōsi, shoes.
 khéndōtsōsi nnāzi, boots.
 khétqīl, a sock or stocking.
 esdzān bi'ā, woman's dress,
 skirt, etc.

akhāl yistlé, leather leg-
 gings.

akhāl yistlé āst'ē'nbīnsh-
 gyēsh (āst'ē'nbīnlgīzh, āst'ē'-
 nbīdeshgīsh), I cut the leather
 for leggings.

yō nłchīni (yolchīni), or
 yō tsīni lagāigi, silver buttons.

ā bił da'naznīligi, clothes
 buttons.

baghāhodzā, a buttonhole.

biłda'nā'āsh'a (biłdā'nsā'ā,
 biłdā'ndesh'āl), I button it.

bēhidesdōn, tight fitting
 clothes.

behādītēhi, clothes.

chīnbā ādīn, spotless.

chīnbā ādīn go āshlē, I
 cleanse it.

chīnbā tqanāsgīs (bātqasē-
 gīs, bātqādesgīs), I wash dirt
 off.

chīn bāishdē (bāhīldē, bā-
 deshda), or bāishtōd (bāhitōd,
 bādeshtōl), I wipe dirt off
 (from silver, clothes).

ā nīgo sīltsōs, turned inside
 out.

ātqēl sīltsōs, an apron.

chā' dāhaskhāni, a round
 hat.

chā' lābāigi, a gray hat.

chā' lizhīnigi, a black
 (modern) hat.

chā' bijānēl hulōni, a tas-
 seled headband.

chā' dā'dijāhigi (sticky), a
 silk headband.

chā' istīfnigi, a freckled
 headband, etc.

BEDDING

The early bedding consisted of a round mat of grass woven *sunwise*, which was used in connection with the grass blanket. Buckskin, buffalo robes, and sheep-pelts, have long since superseded this grass mat, and at present the sheep-pelt is used almost exclusively. These are spread out on the floor of the hogan, and men, women and children retire here, wrapped in their blankets, with a saddle, coat or convenient bundle as a pillow. American beds and mattresses, too, are used by some.



Yucca Mat.

WORDS

yāṭqēl (yaātqēl, which lies under), bedding.

tlō' yāṭqēl, the grass mat.

shābikēgo yistlō' (bitqādā-deshbīzh, braided), woven sunwise.

ābāni yāṭqēl, buckskin bedding.

yāṭqēl (debé bakhāgi yā-

tqēl), sheep-pelt bedding.

ayān āyāṭqēl, buffalo robe bedding.

tsī'al, a pillow.

tsāskhě, a (modern) bed.

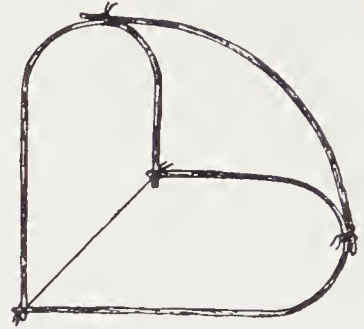
bakhāḍantqē, a bedstead.

nūshkhād, or nūlkhāgo dinestqēl, I'll spread out and retire.

NAVAHO CRADLES

When a child is born (qātlīsh) it is wrapped in a sheep-pelt (yāṭqēl), woolly side in, and placed between the fireplace and west side of the hogan at the spot designated as hunābá'ji. The old women (sāni) of the neighborhood then make a rude canopy or shelter of cedar (gād), or other pliable boughs, with which to cover the head of the child and protect it from sparks of the fire. This canopy, called binīkfdi, or benīkfdi (face cover), consists

of three bows, one as a base resting on the ground (1), the second (2) placed upright and attached with cords to the ends of the first, while the third (3) extends as a brace from upright to base, and is secured with cords at the center of the upright bow and center of bow at base. A cord (4) stretched from end to end of the bow at the base completes this temporary canopy, which is held in position by the weight of the child

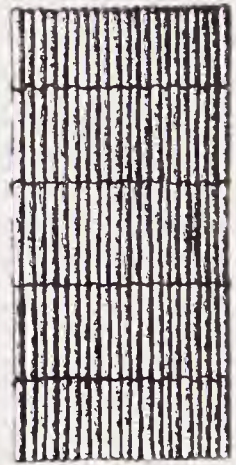


Face Cover Cradle.

A blanket or cloth, and in wealthier families a tanned goatskin, is thrown over this framework to insure against injury from the sparks of the fireplace. It is of interest that the legends designate the first, or bow at the base, as *shaitqá* (a word of no special meaning); the second, or upright bow, as *natsílíd* (rainbow); the third, or brace, as *natsílíd ágúdi* (the curved rainbow).

awâé binīkídi, face cover.

The object of improvising this rude cradle is obviously to protect the frail and tender (*dīt'ódi*) limbs of the newborn babe; hence it is employed for the first twenty-five days after its birth. The cradle is now supplemented by a small blanket for a pillow, and a harder foundation in the shape of twigs, which are peeled of their bark, laced together with four strings, and placed under the child, which still occupies the place in the hogan mentioned in the preceding paragraph. This second cradle is known as:



Laced Cradle.

awâétsāl yistl'ónigi, the laced cradle.

tsī istl'óni, laced twigs.

bitsiyá siltsōs, the pillow.

The laced twig cradle is employed for about two months and

then displaced by a third type, which is employed for a period of another month or so, and finally makes way for the cradle proper, or fourth type. The bottom of this cradle consists of a single board, which accounts for its name, *awâtsâl lâ âzé*, the whole cradle, while the board on the final cradle is split in two and then laced together, so that it is sufficiently designated by *awâtsâl*, the cradle. As both types are similar in construction, and are similarly used, the following applies to both, with such exceptions as are noted.

The wood used for the various parts of the cradle is such as may be easily hewn to the desired thinness; hence, cottonwood (*tīs*), pine (*ndîshchî*), willow (*kāistsô*), weeping willow (*tīs tsôs*), and piñon (*destsîn*), are ordinarily employed, though recently some avail themselves of boards from a coffee, or dry goods box. However, the wood of a tree riven by lightning, or broken by the winds, or against which a bear has rubbed himself, is never used for the cradle, as that may prove injurious (*bahâdzîd*), hence:

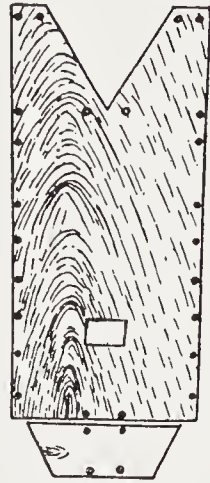
tsîn bô'ôs'nî', or *f'nî' bîndî'â*, or *f'nî' bîdî-tsîn*, a tree riven by lightning.

nîyôl tsîn læhidînfîyîzhi, or *tsîn nîyôl qayîdzîsi*, or *nîyôl bîndî'â'i*, a tree curved or broken by the winds.

shâsh yês'nâhi, or *shâsh bîndî'â*, or *shâsh bîdîtsîn*, a bear's tree, or which he has used in rubbing.

The upper part of the boards is cut out in the shape of a frustrum, which gives them an appearance akin to a long bootjack.

Across the width of the board, on the bottom side, a narrow strip is added which, together with the small blanket head-raise (*tsî'âl*) on the upper side, is secured with thongs through holes



Whole Cradle.



Cradle.

provided for this purpose in the boards and strip. (All thongs used for lacing and the loops are of buckskin, or tanned goat-skin if available, otherwise of wool cord.) A small hole is provided in the lower part of the third type of cradle to allow for a passage of the urine, a provision which in the fourth type is maintained by lacing the boards loosely in four places in the center. A foot-rest in the shape of a rounded or triangular board is lashed to the lower part of the cradle, and the sides of the boards are provided with eight holes each, with two holes in the footboard, to receive the lacing loops inserted alternately, so that the first loop is passed through the first and third holes, the second through the second and fourth holes, and so on down the line. Above these lacing loop holes two additional holes are bored to receive the bows for the canopy. These bows are constructed of thin and smoothened scrub oak, cedar, or other convenient wood, four of which are laced together with four buckskin thongs to form a single bow, and then tied loosely to the cradle to allow of a free movement back and forth when inspecting the child. The bow in use on the third cradle is transferred by many to the final cradle. (Some employ a single wide or two fairly wide bows at present.)



Canopy Bows.

The single decorative feature of the cradle consists in a tassel of fringed buckskin (now leather), which is knotted and passed through the hole in the upper corner of the boards. A setting of turquoise (*dotl'izhi*) was inserted near this tassel when the occupant was a boy, with a setting of white shell (*yölgai*) for a girl. Silver buttons have now displaced this setting.

The bottom of the cradle is then lined with the plushy bark of the cliff-rose which, from its use in the cradle, is identical in name (*awætsäl*). This word originally designated the receptacle in which to lay the infant to be carried on the back). A small blanket is laid over this bark, the child placed upon it, and the ends of the blanket securely fastened about its limbs, leaving

only its head visible, which rests upon a blanket or cloth pillow (bitsiyá siltōs) placed over the head-raise (tsi'ál). The child is now strapped to the cradle by means of the lacing cord, which is passed from the upper right hand loop down the line in zigzag fashion, and finally through the loop on the footboard. (In type No. 3 the lacing and carrying cord are frequently not used, though holes are provided for the lacing loops.) A cloth or, in



Woman with Cradle.

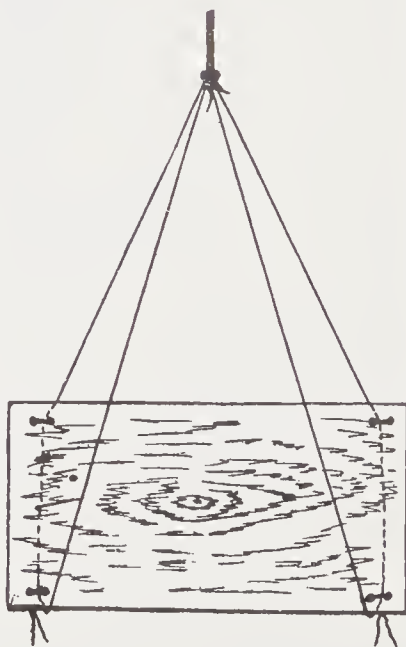
wealthier families, a piece of well tanned goatskin, covers the bow and upper part of the cradle, and is secured to its sides near the base of the bow. This canopy affords both shelter and protection, and may be raised or lowered at will.

The three types of cradle first mentioned are discarded after use and made anew for each occasion. The fourth type, however, is preserved for future use whenever a child has been

successfully weaned from it. Some, therefor, designate it as *awâtsâl yeyî'ndîdâ*, the cradle in which it grew up, in addition to *awâtsâl*, *the* cradle; and *awâtsâl aqîdîdîl*, the cradle (in which the boards strike each other because they are lashed together loosely). When death overtakes the child in any cradle no further use is had for it as it is injurious (*bahâdzîd*), and the cradle is then buried with the child. Previously, however, all knots are untied, the thongs washed, and all parts of the cradle are placed near the child in its grave.

The convenience of the cradle may be gleaned from its varied use. At home it may be leaned against the walls of the hogan, or placed anywhere under the direct and constant supervision of the mother. When astride, she places the cradle with the child across her lap over the pommel of the saddle, while afoot she may rest the cradle in her arms, or slip it over her back and carry it by means of the carrying cord attached to the sides of the cradle and passed over her forehead and shoulders. No attempt has therefor been made to substitute foreign products for the native contrivance.

To remove the possibility of harm from other children, or the bite of red ants, some parents construct a swing in which to lay the cradle. This is a flat board punctured at the corners with two holes each to receive the cords, one of which is tied at each corner. Two long cords are then passed below the board and secured there with the remnant of cord at each corner, while the four ends of the long cords are brought together over the center of the swing and tied there in a knot. To this knot another cord is attached and the swing suspended from a beam in



Swing.

the hogan, or the limb of a tree outside, beyond the reach of children and vermin. Occasionally the mother gives it a swing, and may thus go about her work undisturbed. The swing is called awæ ndabáli, baby swing, or dahidīkhá bī ndábāl, the suspended swing with the cradle.

In legendary descriptions the two boards in the rear of the cradle are constructed of tqádīqīl, dark water. They are held in position by a piece of tqātlā'ji natsīlīd āgūdi, a curved rainbow at the bottom (of water). The foot-rest is constructed of shābitlā' jīlchī, basic sun-red, in shape similar to the present type. The decorative fringes at the top of each board were made of nltsānajīn, dark rain streaks. The four staves or bows of the canopy were laced with natsīlīd lāgaí, white rainbow; natsīlīd dotlīsh, blue rainbow; natsīlīd hītsōi, yellow rainbow, and natsīlīd dīqīl, dark rainbow; and the bow itself, constructed of hayōlkhāl, the dawn; náhodætīsh, the skyblue; náhotsoi, the evening twilight, and chahaṭqēl, darkness. The lacing loops, eight in number, consisted of nltsātīl, rainrays; the bitqēldæ bi'idlóigi, or lacing cord for the front, of atsīnlīsh, zigzag lightning, and the benālījīdi, or carrying cord, of shābitlōl, sun-rays.

WORDS

awætsāl, baby-bed.

awætsāl, cliff-rose, *Cowania Mexicana*; order *Rosaceae*.

tsīn nēheshjī, boards.

bikhétlā setqāni, (which is under its feet), footboard.

awætsāl bitlōl, (baby-bed string), lacing string.

awæ benālījīdi, (with which the baby is carried), carrying cord.

awæ binīkīdi, bow or canopy of the cradle.

awætsāl bitlā setqāni, the brace in rear of cradle.

tsī'āl, pillow.

awætsāl bizhī', bark of the cliff-rose.

binīkīdełtsōs, (face covering), piece of buckskin used to cover child.

awætsāl ashlé (ášhlă, adesh-
hî), I make a cradle.

awætsāl nashjid (nashêljîd,
nâdeshjîl), I carry a cradle
(on the back).

awætsāl nashtqe (nasê,
nadeshtqêl), I carry a c. e
(in arms).

awætsāl nashkhâ (nasâkhâ,
nashkha do), I carry a cradle
(empty).

awætsāl dâhidishkhâ (dîkhâ,
dideshkhâl), I hang up the
cradle (empty).

awætsāl dâhidishtqê (dîltqî,
dideshtqêl), I hang up the
cradle (with child).

awætsāl ni' ninishtqê (nîltqî,
nideshtqel), I lay the cradle
down on the ground (with the
child in it).

awætsāl nî' ninishkhâ (ni-
nâkhâ, ndeshkhâl), I lay the
cradle down on the ground
(empty).

awætsāl nadistsê (dîtsî, di-
destsê), I lean the cradle
against something.

awætsāl bildishtlô (dêltlô,
dideshtlôl), I lace the cradle.

awætsāl kê'êsh'ád (kê'fâ,
kedesh'âl), I unlace the cradle.

awætsāl bizhî' dinishqîsh
(dîfyîzh, dineshqîsh), I rub
the bark.

awætsāl bizhî'yîlzhóliashlé,
I make the bark of the cliff-
rose soft.

awætsāl bilô' bîdashlô
(dasêltlô, dadeshtlôl), I put
the strings on the cradle.

awæ bitsâl biyishtqê (yîltqî,
deshtqêl), I put the baby in
its cradle.

awæ bitsâl biqashtqê (qâl-
qadeshtqêl), I take the
baby out of its cradle.

awætsāl shanâkhâ, bring me
the cradle (empty).

awæ shânltqe, give, bring
me the baby (bed and all).

THE CHASE

The hunting of deer, antelope and elk was always conducted with many rites under the guidance of a shaman. Accordingly we find the following rites:

nidzî hanf, the corral hunt rite.

nashdüikê, the rite of the wildcat.

tîistsókê, the rite of the bullsnake.

natléitsokê, the wolf rite.

These rites are at present not strictly observed, and the presence of a chanter is not required. However, some of the ancient customs are still observed. A corral, for instance, serving as a camp for the hunting party, is built with the fireplace in the west of it. Such songs and prayers as may be known to the hunters should be recited, after which they proceed in single file until ready to disperse in bands of two, or singly, and return to the camp at dusk. Joking and gambling, or leaving the corral unnecessarily, are forbidden. The booty is divided between the hunters, the hide usually becoming property of the person first sighting the game, unless otherwise agreed to.

Owing to wanton slaughter and increasing settlement game is not very plentiful, but, notwithstanding the game laws to the contrary, hunting parties often make raids and kill deer merely for the hide and sinew.

Various methods were observed in the early days in hunting deer, antelope and elk. A large corral, opening to the east, was built of shrubbery and the game driven into it and slaughtered. Traces of these corrals may still be found in various localities.

A pit, covered with brush and grass, was sometimes concealed behind an artificial fence, which the game was forced to take, and thus be entrapped and slaughtered in the pit beyond. Another method was to dig a pit, or series of pits, in a zigzag row, each pit being about six feet in depth and covered with brush and a light layer of ground. A strong, pointed stake, about five feet in height, was planted in the center of each pit, and transfixed the prey as it fell into it.

Game was less frequently captured by setting fire to the underbrush around a place of concealment and forcing the frightened animal within convenient range of a bowshot.

Stalking, too, was known. The skin of a deer or antelope is fastened around the shoulders, drawing its head close over that of the stalker, whose body is smeared with clay. The stalker holds two small sticks in his hands to assist in walking in a stooped position. Bow and quiver (or gun) are slung under

his belly, while the headgear is arranged so as to enable the stalker to throw back the skin and antlers, and disencumber himself for an opportune shot.

Any one of these methods was permissible in securing hides and sinew for ceremonial purposes, though the ritual manner of dispatching the animal by strangling, instead of wounding it, must be observed.

When a bear has been killed pollen is strewn from chin to butt along the stomach, and on its arms and legs. The incision is made along these lines and the pelt removed. The best portions of the venison are then severed, carried home, and laid aside in a heap. A sacrifice, consisting of *báshzhĩni* (cannelcoal), or other *ntl'ís* (precious stones), and prayer, is made over the venison, after which it may be consumed. As a rule, however, the bear is avoided.

Badgers, prairie dogs, rabbits, mountain rats, and the like, are shot with bow and arrow or gun. Rabbits and rats were also trapped in a stone-trap. Prairie dogs are sometimes decoyed by means of a small mirror reflected into their burrow, blinding the animal. This moment is chosen to pierce it with a barbed arrow. In the vicinity of water they are often flooded. The drowning dog, which comes to the opening of the burrow for breath, is quickly snatched by the neck and killed with a stone. Floods caused by the overflow of arroyos in the rainy season usually attract a number of Navaho in search of hapless prairie dogs.

Rabbits are run down in the snow on horse or afoot. A party combining in the summer time for a rabbit chase will form a large circle, driving the rabbits to the center, where they are clubbed to death.

Eagles were decoyed by means of a rabbit dummy, which was worked forth and back by means of a string attached to it. The hunters, concealed in a pit covered with sticks and weeds, usually select a place much frequented by eagles for their operation. The bird is caught by its feet and neck and pulled into the pit.

The beak is filed with a stone, and the down and tail feathers are plucked. If other eagles are in sight he is put aside, and released with the others who have undergone the same treatment. Feathers obtained in this manner are known as live feathers (*qinǎ atsós*). The eagle hunt always requires song and prayer.

Squirrels, turkeys, mountain sheep and porcupine are also hunted at times. Birds were usually ensnared.

WORDS

diní', game.

bí' *hashzhě*, or *bákhāshzhě*, I hunt deer; also *jádi*, antelope; *dzě*, elk; *debětsétqǎ*, bighorn; *hazaí*, squirrel; *ǎlǒ-dzǐlgai*, pine squirrel; *tsídǐfǐni*, ground squirrel; *dlū*, prairie dog; *tqázhe*, turkey; *dasáni*, porcupine; *nahashchíd*, badger.

tsětóhi hashzhě, or *hanshtqǎ'*, I hunt for bear.

gǎ'tso, or *bí'* *shānaāghǎ*, I run jackrabbits or deer down.

libe shānaāghǎ, I run them down with a horse.

bí' *sélō*, I roped a deer.

nǎízě nashzhě, I hunt silently (I creep upon).

bí' *banash'ná'*, I crawl upon a deer.

bí' *biǐdeshdó'*, I shoot a deer (with a gun).

gǎ' *dishdó'*, or *yishkhǎ*, I shoot a rabbit with an arrow.

bí' *bikínshzhē*, I found a deer on the hunt.

bí' *séłqǎ'*, or *iyéłqǎ'*, I killed a deer.

bí' *āsésī* (*sésī*), I missed a deer.

alkēnashǎ, I walk with pieces; i. e., I cut and put the strips aside. (The venison was cut into strips, hung in a tree, and covered with a hide until it might be removed).

alkēnséyǎ, I have finished cutting, or *altso ndīgish*, or *niyéłgish*, I have cut it all.

dǎ'nashéłjē, I have put (the meat) on high (in a tree).

nikhǐniyǐ', or *nanshgǐ'*, I carry the meat home (afoot or on horse).

nǐdzǐn, building corrals, corralling the game.

cháčkě', a pit.

cháčkēndē (*chěčkīndě*), falling into the pit, trapping game in pits.

ănáhaká, burning around,
smoking the game out.

bēdá', with the antlers,
stalking.

jádi dētqél, antelope antlers.

bēdá' nasht'á' (nsist'á,
ndesh'át, or ndesh'tál), I put
on the antlers.

naazt'f'æ năăzhé, hunt by
round-up (of rabbits).

atsá aq'nîł, or qa'aq'nîł,
(pulling in) eagle trapping.

ōd, eagle trapping, and the
ceremonies in connection with
it.

NAVAHO GAMES

Amusement and pastime, but above all, a means of gambling is furnished by the various games, for the Navaho is a passionate gambler, and his games of dexterity and chance have no interest unless a stake is to be won. Indeed, some of the modern card games are uninteresting, and the fact, surprising to him, that time is spent at cards for mere amusement.

Most of the native games are now not generally in use, such as the hoop and pole, various ball games, dice, with the exception of stick dice, though many again are fond of the moccasin game, and in some districts also of archery. Modern cards have largely displaced these games, though their present knowledge of cards is limited to two games, called monte and coon can, at which some are very skilled.

Native games, as a rule, are surrounded with legendary accounts, called bási hanf', legends of games, in which the origin of the game and its rules are laid down.

bâs, the games in general.

bási hanf', the legends of
the games.

dákha, a square, the play-
ing card.

qa'î'nîli, which are drawn

out, from the manner in which
the cards are turned up in the
game of monte.

(nezná) dăhijí, the (ten) cards
are held, the game of coon
can.

The names for the cards and spots are mostly corrupted Spanish words:

básdös, clubs.

óla, diamonds.

sbáda, spades.

góbäs, hearts.

äs, the ace; äs ësbbáda, the ace of spades; äs básdös, ace of clubs, and so on for the other spots.

al dös (akdös), the two spot.

tqá'igi (sbáda), the three (of spades).

dfigi, the four spot.

ashdlá'igi, the five spot.

hastqánigi, the six spot, or sës (esbbáda), the six (of spades).

tsöstsédigi, or séde, the seven spot.

Eight to ten are missing in these two games, hence they are not mentioned.

sóda, the jack.

h (sbáda), the queen (of spades).

zhē, the king.

óla dākhād, I played out diamonds.

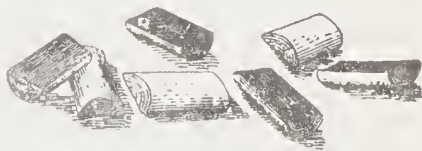
óla íshla, I made diamonds (I am playing for a diamond run).

GAMES OF DICE.

The game of dice known as dākhā tsostsédi, or seven card, is not in vogue at present, but is mentioned frequently in the legends as the pastime of the Holy People. In earlier days various sets of these dice were carried in the leather shoulder pouch, which to-day is used for tobacco and other trifles, and the basket used in shaking the dice was carried below the arm.

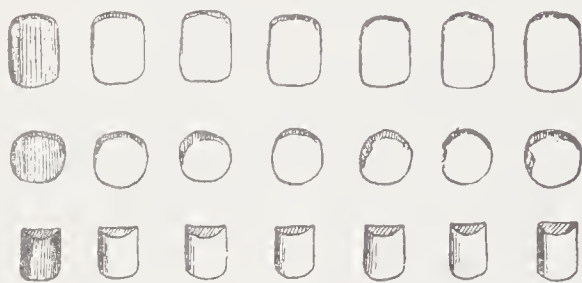
The dice were cut of mountain mahogany or black greasewood twigs, about the length of the second joint of the index finger, say an inch long by one-quarter

inch wide, and the stick flattened on one side. Usually, however, they were made in the shape of a disk, about one-half inch in diameter. The set consisted of seven chips, six of which



Dice.

were colored black on one side, and white, or the natural color of the wood, on the other, while the seventh was colored black on one and red on the other side. These seven were shaken in the basket and thrown upward, with the winning count as follows: Six white and the seventh red is designated *hogá*, all white, and wins (*niibí*); six black and the seventh red also wins, and is called *bichí*, the red's (count). Likewise, six black with red down (or seven black) is *hochí*, all red, and a winning count, just



Dice.

as six white and the red down (or six white and one black) is *bichí*, the red's (count), and wins. Other combinations of white, red and black did not score.

The number of points was decided before the game unless one wished to stake his fortune on a single throw.

Another game of dice was called *ashbíř* and was played with four rounded (*níyis*) sticks, each four fingers wide (or long). One end or tip of the sticks was colored black and the stick was known by the color next to the tip. The body of the sticks was painted yellow and blue, blue and yellow, white and red, red and white, respectively. These sticks were thrust against a blanket suspended above the players, the first two sticks being thrown in succession by either opponent, and the final two together. In rebounding from the blanket the sticks fell into a basket filled with sand, which accounts for the name, *ashbíř*, it falls heavily (and does not move on the sand). Counts were made only when the sticks were crossed in falling, as remarks like

these indicate: "shi akhá, I'm on top," or "ni ayá shi akhá, you're below, I'm on top." When unsuccessful the verdict was: "ála aqilndesdlf, they are side by side," or "adzí, missed." This throwing was continued until a point was scored by crossing the opponent's stick.

A variant of the preceding game owes its various designations to the dice employed, being known as nézhi, wózhi, tqéli and tsfi. These were four sticks or dice four fingers wide (long), two of which, nézhi and tqéli, were flat, the other two round. nézhi was the "white stick;" wózhi, black on the front with blue rear; tqéli, "the one with the breast," because of its black front with a flattened back, and tsfi, "the one with the head," which was black, the body or lower part of the stick being colored blue. The dice were distributed, each opponent taking a round and a flattened one. These were shaken in a basket and thrust against the suspended blanket and caught in the basket again, the object being to have them crossed in falling, as in the preceding game.

tsfi bánditāsh, let us play the black head, and so on of the other sticks.

A game of stick dice is frequently played by Navaho women around a circle of forty stones. Three billets of wood are thrown upon a flat stone in the center of this circle, so that they will rebound from a suspended blanket and fall within the circle around which the gamblers are seated. Small twigs placed between the stones are used as counters, and moved back and forth according to the fortunes of the game. The winning count is forty, the winner taking the stakes deposited under the stone in the center. The circle is divided into four groups of ten each, with an opening left between, or at the cardinal points, and the scoring twigs are placed at the opening next to the player. The billets may be flattened on one side and rounded on the other, or slightly rounded on both sides, in which case they are colored with two and three black bands in water color to distinguish them. Accordingly, when all flat sides are turned

up, the count is five points, while all round sides up scores ten counts. Similarly, all three bands up count ten, all two bands



Bouncing Stick Game

count five; one two band with two three band, or *vice versa*, count three, etc. Points are lost by dropping the sticks outside the stone circle.

The game is not played after sunset, and is a woman's game.

tsídīl (from tsīn dīl, stick rebounds), stick dice. Some also use tsédīl, but incorrectly.

tsénastī, circle of stones.

tsīn, the billet, or stick dice.

qāātqīn, the opening in the circle.

HOOP AND POLE.

A favorite pastime of the Navaho, which at present is rarely witnessed, was the hoop and pole game. The hoop was wound with hide or buckskin, and ranged from one to six and a half inches in diameter. It was rolled over a course east and west, and the pole thrust at it when in



Hoop

motion in an effort to pierce the opening. The pole was decorated with thongs of buckskin, and counts were taken as these strings, called turkey feet, lay across the hoop. The number of points to be scored was decided upon before the game. The following names show the variety of poles used.

nă'ăzhózh, it is bridged, the pole, the game of hoop and pole.

nă'ăzhózh aqádestfóni, the pole which is lashed together, when two sticks were lashed with buckskin.

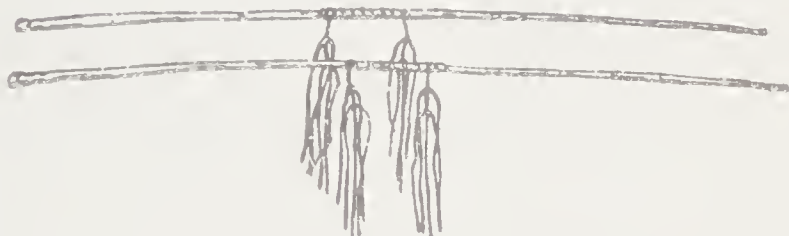
nă'ăzhózh dilkhó'i, the polished or slick pole, a single stick with a single buckskin thong attached to the grip, or butt end, with two thongs secured at the tip, or striking end.

nă'ăzhózh ditfó'i, the fluffy pole, which was profusely decorated with thongs and claws of various animals.

nă'ăzhózh dilkhó', the smooth pole. This was a small stick about the length of an arm, and the hoop used with it was simi-



Pole



Pole

larly small in size, only an inch in diameter. This hoop was trundled toward a marked line, while the pole was thrust at it in a stooped position.

bás, the hoop.

tqázhe khē, the turkey feet, buckskin thongs in center of pole.

bikídesdiz, the lashed pole, the buckskin lashed around the two sticks.

hálatlöl, the hand string, attached to the butt end, or handle.

akhálatlöl, the striking cord at the tip of the pole.

BALL RACE

The game of ball race was played in the cooler seasons of spring and fall, but has now practically disappeared. It consisted in kicking a small round stick over a course previously agreed upon by the contesting parties. Usually the best runners were selected by both parties, as a distance of some miles was ordinarily stipulated. The stick must be kicked and touched only with the foot, so that in the event of its falling into a brush of cactus, the foot must be used in removing it. Should the leading runner miss a kick his partner, or partners, strove to pass it to him in running, the object being to reach the opposite goal first. The runners always stripped to the breechcloth, as is done in foot racing to-day.

Horse and foot racing have long since displaced the ball race. Chicken pulling, too, is a sport much enjoyed by the Navaho. It is given by the traders, who offer prizes of five and ten dollars to the horseman who succeeds in extricating a live or dead chicken, or dummy, buried in the ground. The riders gallop at full speed, leaning over the saddle, and endeavor to jerk the chicken from its grave. The victor must return the trophy to the patron of the sport, an effort which usually ends in a lively scrimmage.

ó'ól'is, ball race, also called ídi'és.

ó'ól'is bânaldél, they played ball race.

nahóqai, chicken, the chicken pulling.

BALL GAME

The American game of baseball is at present known as aqæ-jólyedi, the rounding, or running around, a name which was

given to a game of ball still played some twenty years ago, and similar to baseball. This game was played on a field with four bases laid out in the form of a square. The bat used was the curved shinny stick held at the knotty end. The ball was made of the soft cliff-rose bark, or rags, covered with buckskin, horse-hide or goatskin. The pitcher threw, or rather bowled, the ball to the batter, the catcher returning it. Four strikes were allowed the individual batter after which the side was retired. Several batsmen might oppose the pitcher simultaneously and strike at the ball from either side, or in the event of two or three strikes, the batter may retire and await a better opportunity to hit the ball. If successful, the batsman ran to the base at the east corner, from which point he completed the circuit by way of the south, west and north bases. The basemen and fielders stationed between the bases must gather the batted ball and strike the runner, or touch him with it while running to a base. The runner might dodge, jump or leave the base line at will to avoid being struck or touched with the ball, in which event the side was retired. At present this game is not played.



Ball

aqæjôlyedi, ball game.

beăkhăli, the bat.

joł, a ball.

iná'ilyēd, the goal, the north

azhí', the bark.

base.

awătsāl, cliff-rose.

alchî'náălnî', the pitcher.

HIDDEN BALL GAME

The game of hiding the ball is better known as the moccasin game from the important part which the moccasin plays in it. It furnishes an innocent pastime for the long winter months, and is played only at night in that season. According to legendary accounts it was first played by the people (or animals) of the day and night for the purpose of deciding whether a difference between

day and night should exist. As the contest was interrupted by the rise of dawn and the sun, the question was never settled, in consequence of which the night always succeeds the day.

The chief features of the game are the burying of four moccasins, allowing only the tip of their uppers to extend above the ground. A small pebble is hidden in one of the moccasins, and its presence guessed at by the opposing party, who win or lose as they succeed or fail in locating it. One hundred and two sticks are used in counting, the total number of which must be won by one of the parties before the stake can be gathered in.

The various details of the game are well established and very numerous. To preclude fraud, for instance, the moccasins are exchanged, and placed alternately in a line running east and west, so that no two moccasins belonging to one set of players are set side by side. To decide the "ins," or first chance at hiding the ball, a bicolored stick, or a playing card, or a coin, is tossed in the air, each party selecting its color previously. The winners then conceal their movements behind a blanket curtain, and hide the ball in one of the moccasins, after which all are covered and tightly packed with dirt. A small stick, about eight inches long, is used as an indicator in striking the moccasin. Three chances are allowed, the moccasin struck being unearthed after each guess to show that it is empty. When the player has staked all chances on one guess only, he loses ten points if unsuccessful. This method, however, is not often resorted to, as it is reckless gambling. Usually two and three chances are taken, and the counts vary accordingly, six points being lost for two, and four points for every three unsuccessful attempts. The ball remains in possession until the opposing team succeeds in locating it, when the same process is repeated by the winner until one of the two teams has lost all of one hundred and two counters. As the counts of four, six and ten will even up at a hundred, the remaining two strips are given the value of these three counts, or as much as may be desired, so that they equal either four, six or ten counts, as the player

stakes his fortune on one, two or three chances. These two counters are called the grandmothers, while the others have no names. The counters are made of yucca, the broad leaf of which is cut into narrow strands. The stake ranges from twenty-five cents upward, and it is not unusual that a whole night is spent on one single game. If at dawn the game is called, the stake is returned to the owner, but if it is decided to finish the game after sunrise, the players must paint their faces black by running a line with charcoal just below the eyes, as is prescribed by the legend.

This game may be played during the intervals of any ceremony, excepting that of the renewal (hozhóji), and is interrupted only in the course of actual singing or sand painting.

WORDS

khěshjě (or khě shijě, the moccasins are lined up), the moccasin game.

chěætqīn, the doorway, the moccasin next to the door.

chěætqīn bâ, the one next to the doorway moccasin.

ntsítlǎ, the base of the west pole of the hogan, the moccasin west.

ntsítlǎ`bâ, the one next to the west moccasin.

khěťās, shoe strings, coun-

ters made of yucca.

tqolasht'óshi, which glides away, the ball.

bedíltsíli, the striker or indicator.

yá'iltě', it is tossed up, the stick, card or coin used for this purpose.

khushdǎ, it's here!

biyf' ádin, it isn't here!

bichú'i, the grandmothers, two counters which are always played last.

SHINNY

The game of shinny is mentioned in some legends as played by the divinities, but is not often witnessed at present. The object was to put the ball over an opponent's line previously agreed upon. A bag-shaped ball, sometimes enclosing a smaller

one of buckskin, was used, and the ball struck with the curved end of a stick or bat. It is still played by school children, in



Shinny Sticks and Ball

addition to such modern games as marbles, top spinning, and the like.

ndashdīlkhāl, shinny.
joł, the ball.

beākhāli, the shinny
stick.

ARCHERY

The game of shooting at an arrow is still in vogue in some districts. Another method of playing it, but which has now entirely disappeared, was called "shooting at the yucca." A ball was made of bark and wound with yucca to which a stick of scrub-oak was attached by means of a yucca cord to give momentum to the light ball. This was thrown in the air and the archers discharged their arrows at it as soon as the ball was drawn downward by the weight of the stick.

sāzī' oldó, shooting at the arrow.

nadishtó' (nadishtó', nadideshtó'), I play arrow shooting.

THE CAT'S CRADLE

The cat's cradle is played by children during the winter months when the Spider People, to whom it is attributed, are at

rest. Its object is ostensibly to educate the children by riveting their attention, and to supply them with an innocent occupation.

na'ätl'ó, the cat's cradle
(nä'ashtl'ó, I weave continuously).

The figures made are usually those of constellations:

sôtso, morning or evening star, or one of the first magnitude.

hastqín sākāí, feet ajar.

dīlyéhe, Pleiades.

sô lāni, many stars.

sôhótšī, pinching stars.

sô bidé hulóni, the horned star.

Or figures of animals:

tīsh, snake.

má'í, coyote.

má'í altsáyilāghúli, coyotes running in opposite directions.

nashúi dichízhí, horned toad.

náēshjā, the owl.

And other figures:

atsínltfīsh, zigzag lightning.

altqí, bow.

kā', arrow.

kōs'ishchín, cloud effect.

at'ó', nest.

hoghán dalaí sá'á, a single hogan.

altsáhoghán, double hogan.

diné, a man.

chízh joyéli, wood carrier.

sīs, a woman's belt.

lēsīs, small stomach of a sheep.

āyfd, sternum with ribs.

whō sēzīni, a standing tooth.

whōshiyíshi, a bent tooth.

SOCIAL CUSTOMS

BARTER

An extensive trade was carried on in the early days with the Pueblo and other neighboring tribes, as well as with the Mexicans later on, and consisted chiefly in exchanging the serapes and saddle blankets for buffalo robes, bridles, beads and turquoise. The value of money was not known, and its use in trade

probably dates back to the early sixties, or the time of the civil war, as would appear from the old five and ten cent paper notes, the names for which have survived in those for the nickel and dime of the present day. Subsequently, constant intercourse and trade with the Mexicans made the introduction of coins very general, so that it is not surprising that the names for the coins are borrowed and corrupted from the Spanish. At present money has set the standard of value for everything purchased. Still, beads and turquoise are frequently exchanged for cattle, deer-skins, blankets, etc., which are estimated according to quality. The ancient custom of exacting a stipulated ransom for a criminal offense against a clansman is still in vogue.

As a rule the Navaho is a liberal spender, and by no means slow in driving a good bargain. The native products, as wool, cattle, sheep, piñon nuts, silverware, blankets, baskets, etc., are at present easily exchanged at the various trading posts of the country for money, merchandise, and foreign products generally.

nalyé báhoghán, a store.

nalyé yá sědáhi, a trader.

COIN

Coin and paper money are now quite general and are carried in modern pocketbooks, or in the belt, or wrapped and tied in a strip of calico and carried in the pocket. Larger amounts are frequently buried in the ground for greater security. Silver dollars are preferred to paper notes, as the Navaho are not familiar with the respective value of the latter unless it be pointed out to them.

sentáo (Sp. centavo), a one cent piece.

łítso, a nickel or five cent piece. Literally, the yellow paper referring to the old five cent paper note.

daláí dotłísh, a dime, or ten cent piece. Originally the bite ten cent paper note.

daláí yál (Sp. un real), twelve cents. At present this expression is rarely used, though formerly it was frequently a substitute for the present dime, and an equivalent for it.

gfnisi (Sp. quinze), fifteen cents.

nakhi yāl (Sp. dos reales), two bits, or twenty-five cents.

Similarly, dī yāl, four bits, or the half-dollar; hastqā yāl, six bits, or seventy-five cents.

béso (Sp. peso), one dollar, though: neznā yāl, ten bits, or a dollar and a quarter; nakhidzāda yāl, twelve bits, or a dollar and a half, but béso dōbâ'ā hastqā yāl, one dollar and six bits, or a dollar and seventy-five cents, while béso dobâ'ā nakhi yāl, a dollar and two bits, is also used for a dollar and twenty-five cents.

nakhi dotlīsh (two blue ones), twenty cents, and so on with three, four, etc., dimes, excepting the half-dollars, etc., as noted above. Similarly with the dollars, as nakhi béso dobâ'ā hastqā yāl, two dollars and seventy-five cents.

The five dollar note is sometimes designated as ashdlāigi, a fiver, the others as neznānigi, a ten, and nadfnigi, a twenty dollar note. These are also used to designate the gold coins (ōla, gold).

Small change in dimes and nickels, quarters and half-dollars, are frequently designated by yāl (yāligi), as yāl ādīn, I have no small change.

Private coin, such as is used by some traders, is called besh tāhi, small or chipped money, or béso bisgā, dried or evaporated money, or beshkhāgi, leather money.

nahashnī (nahālnī, nāhidesh-nī), I purchase, buy or sell it.

nāyisnī, he bought or sold it.

do-nahanfda, they don't sell here, this is not a store.

bā'ilf (bā'āzli, bā'ādolet), it costs so and so.

qāgō bā'ilf, what is the price of it?

dukwi bā'āzli, what did you pay for it? what did it cost?

do-ilīda, it is worthless, or too cheap.

ashdlā bā'ilfnigi nsfn, I want something costing five dollars.

dukwi idzī, how much have I left?

nakhi yāl idzī, there are still twenty-five cents due you.

atsā'ilē, he bleeds a person (for money), one who extorts money.

haná be asht'ë'nbínshyēsh,
I looked the goods over, I get
prices or quotations on goods,
as, akhál yistlé asht'ë'nbínsh-
yēsh (asht'ë'nbínshyēsh, asht'ë-
nbídeshyīsh), I priced a pair
of leggings (but did not buy
them).

atsá'ishlé (atsá'iyélā. atsá-

diveshlé), I extort money.

álā halé', united, clubbing
together in payment for a
thing.

nīqinānīdē, or binānīdē
(binānīdē, binādīnodā'), we
cleared this on the transaction,
or t'óōqoyūi dāāqideshchí
(nt'á), the yield was plentiful.

BEGGING

The professional beggar is unknown to the Navaho, and instances in which an individual makes a livelihood by begging from his tribesmen are indeed few. Assistance is offered to unfortunate paupers, while no attention is paid to the idler.

Acquaintance and friendship with whites offers many facilities for asking favors and accommodations.

adókhēdi, a beggar.

adóshkhēd (adéshkhēd, adī-
déskhkhī), I beg unceasingly
(a person who does not hesitate
to ask another for the use of
anything, such as for money,
a wagon, horse, etc.)

tqáé'í' bakháč, and tqáé'í
bá'ád, poverty and misery
personified, male and female.

tqáé'í' báqodishchí, he was
born to be poor, one who lives
from hand to mouth.

tqáé'í' qúyē, he is noted for
his poverty.

bīl qúyē, he is noted for
his sleepiness and laziness, he
can boast of nothing but pov-
erty and sleep.

BORROWING

People borrow extensively from one another. An excessive interest is charged on loans of money, the usual rate being up to twenty-five cents per month on the dollar. A horse, belt, bridle, bracelet, or anything of value, is offered in security and forfeited in default of payment. The Navaho lender is usually

inexorable, and always claims the security at the expiration of the time limit.

To obtain money and merchandise much of their silver- and ornamental ware is pawned at the stores for a limited number of days. A reasonable interest is charged with a security, often none at all, so that pawning with the trader is usually preferred.

shahāntsé, trust me for this!
(from nahastsé, nahátsi, nahadestsí, I trust you).

shahá'ā (nahá'ā, nt'áé), I owe him (or you).

shahájil (pr. shahajil, sháhadójil), he advanced to me.

atséd ish'f (nt'áé), I borrow it.

do shída, it is not mine.

atsé it'é, it is borrowed.

atsé nash'á (nsá'á, nash'ádo, or ndesh'ál), I borrow (a dollar or wagon, etc.) Other roots are similarly used: atsé nashtqé, I borrow a horse; nashtqí, a shovel; nastsós, a saddle blanket; nashlé, a rope; nashjá, grain; nashníl, several objects, etc.

atsé na'nsh'á, I lend you a dollar, or simply, na'nsh'á (na'ná'á, nádesht'ál), I lend you a saddle. (See *infra* for other roots.)

nansh'á (nānā'á, nádesht'ál), I give you a dollar (see other roots below).

inóltqâ'i, added to it, interest.

nāinā' idestsól, I'll charge you this rate of interest (from nāinā' istsód, nāinā' íltsód, nāinā' idestsól).

nanádeshtlé, I'll pay you this interest (from naná'nshdlé, nanánshdlá, nanádeshtlé, I pay you in return).

nanánsh'á (nanánā'á, nándesh'ál), I return the saddle to you. (For other roots cf. pawn *infra*.)

á'nahazlá, or á'ázláigi, or á'selá, or á'nábaznil, pawned goods.

á'nshlé (á'núllá, á'ndeshlé), I place a rope or strand of beads in pawn.

á'nshqtí (á'núltqâ, á'ndeshqtí), I pawn my wristlet (shikéťó'), or hatband.

á'nsh'á (á'nnā'á, á'ndesh'ál), I pawn my saddle.

á'nshqté (á'núltqí, á'ndeshqté), I pawn my horse.

â'nnsôs (â'núlsôs, â'ndes-
sôs), I pawn my saddle blanket.

â'nnsjá (â'nájā, â'ndeshj),
I pawn my bow and arrow
(kâ', al tqf).

â'nnsnîl (â'núnîl, â'ndesh-
nîl), I pawn my beads.

nâ'nnshlê, I pawn a rope to
you, etc. of the other roots, as
in the preceding examples.

ndîzfd bahaz'â, or ndîzfd
bánahunâ'â' (nt'é), it is in pawn
for a month.

qîl basâ'â, it is in pawn for
a time (or, for instance, he is
in jail for a certain length of
time).

dukwish qîl bánîná'â, for
how many days did you put
it in pawn?

qîl bánnâ'â (bánîná'â), I
pawn it for so many days.

qîl yánnââ, he gave him so
many days on it.

æ'æ'â', or bæ'æ'â', it's sun
has set, the pawn is run out.

yô æ'æ'esh'â' (æ'i'f'â, æidesh-
'â), I lost my pawned beads, or

yô bæ'æ'esh'â', time is up
on my beads, or

sitsâ æ'æ'â' (sitsâ æ'i'f'â,
sitsâ æ'ido'â), or sitsâ bæ'æ'é'â'
(sitsâ bæ'i'f'â, sitsâ bæ'ido'â),
my time is up.

baghânâhot'â' (baghânâhot'â,
baghânâhodot'â), I extend the
time on a pawn.

qîl baghânât'â' (baghânât'â,
baghândot'â), I received a few
more days on my pawn, or

qîl bînet'â' (bînet'â, biné-
dot'â), time was extended.

qâ'âshdlê (qâ'ashdlâ, qâ'â-
deshdlê), I redeem anything
(out of pawn).

yô qanâshdle (qanâshdlâ,
qândeshdlê), I redeem my
beads, or a whip, etc. (Cf.
other roots, with tqîl, â, tqê,
nîl, etc.) '

ôkhûi dîna'â, or baghâoz'â,
the sun is at or beyond the
point stipulated, that is, a
debt is due now.

ânchqf', he is close, he will
exact a debt, he will not
extend the time.

do-bînesh'âda, I can not
afford to pay.

tâakhi hodlâa adishnî (ad-
nîd, adîdeshnî), I granted a
loan gratis, as tsî nabâs shad'-
al, lend me a wagon, or li
shadîltqel, lend me a horse;
tâakhi hodlâa ndishnî, you
may have it (or, I tell you
that you may have it without
paying for it, but return it to
me afterwards).

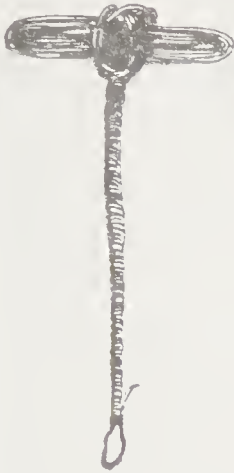
t'áakhi hodlāa shidiní, lend
me this, let me use it?

ānshchf' (nt'áé), I can not
or will not part with it, hence,
ānchf', he is stingy.

BUGABOOS

Insubordinate children were formerly subdued by the use of the bugaboo, four of which were attached to a beam of the hogan. They were made of sumac

(kī, chíhchín), and in shape like that of the accompanying illustrations. The owls (nāeshjā), as they were called, were usually hung up in the evening when, favored by the scant illumination of the hogan, the fancy of a child might easily be led to believe that the owl sitting there should carry it off. Frequent mention of the owl as the mischievous spirit of the legends fostered this belief. The



Bugaboo Owl



Bugaboo Owl

Similar allusions were made to the legendary yéitso, or yěi lābā'i, big or gray gods, cannibals, who preyed upon small children. A survival is probably found in the expression, dolkól, squeeze, whenever a child is in danger.

By way of hyperbole a foolish child or person is often called nāshjā (nāeshjā), owl, or nāshjātso, big owl, as this bird is a good figure of stupidity. digis tso, you big dunce, or yéitso, or yéitso lābā', you big gray fool, are used on similar occasions, because the yéitso, or yěi lābā'i, gray gods, figure as very awkward persons in the legends, and are now given the role of clowns and dunces among the personators at dances.

CARVING

The Navaho do not practice carving in either stone or wood, nor do they represent their deities in effigy for the amusement of

their children, or similar purposes. Dolls and images of some animals, however, are at times carved in cottonwood for ceremonial purposes, which suggests a possible motive for the social taboo placed on some of them. When the death of a snake, a duck, a chicken, a bear, a dog, or a pig, and of a child, has been witnessed by a pregnant woman, or by her husband during her pregnancy, or have been at any time killed by them, and subsequently indisposition and sickness overtakes the woman or her offspring, a singer is called upon to remove such a cause by performing certain features of a given rite over her. In the snake rite (*naṭ'ōye bakháji*), for instance, the singer carves the image of the species of snake, the rattler, for instance, which presumably has caused the sickness, and after placing it on the affected parts of the patient's body, the

image is deposited into the hole of that snake, together with the prayerstick made for it. Similarly, the image of the bear is deposited in the den of a bear, and that of a coyote into the coyote's den. The image of the dog is carried to an open field, barren of brush and tree, which has not been used as a thoroughfare (*qadohoht'éji*, or *kíhunezłáji*, an open field). Here it is placed on the ground with the snout pointing in the direction of *tséyī'i*, a cañon near Los Torreones. The *awéshchín*, or dolls, the *bisódě*, pig, *mósi*, the cat, and *nahóqai*, the chicken, are deposited in any of the numerous cliff dwellings or ruins (*níyá'kēd*, *níyá'kēgo*, underground place) with which the Navaho country abounds. The prayers accompanying the application of these four images are recited in a foreign language, but the fact that descendants of Hopi clans are usually called upon to make



Doll



Duck

the dolls and images, and recite the prayers, would suggest that the language and the custom itself, as adapted to the Navaho, is of recent introduction and of Hopi origin. The accompanying illustrations represent the doll and duck with their prayersticks.

awéshchīn, a Hopi doll.

tłīsh qadałt'égo, the likeness of a snake. Similarly, shāsh, bisóde, łechāi qadałt'égo, etc.

tłīsh qadałt'é ajídlě, the image of a snake is made (at the ceremony).

nfyakeji, depository in a cliff dwelling.

COUGHING AND SNEEZING

Coughing and sneezing are often indications of a cold or indisposition.

diskhós (nt'é), I cough.

hadískhes (hádeskhēz, hádī-deskhós), I cough (out).

dīskhós (dískhós, dīdes-khós), I cough.

ádīqāhodishkhô (nt'é), I hawk.

dokhós, a cough.

chátłīsh (chátłīsh), phlegm.

dokhós shildilné' (shídolnă', shíđídolnă'), I have a cold.

hatsíyādishnī (hatsíyāđínīđ, hatsíyā dideshnīł), I sneeze.

SPITTING

People spit anywhere. Ordinarily no significance attaches to spitting, but at times the leaves of cedar or juniper are chewed and spit out for better luck, as, for instance, into the face of a balky burro. Medicines are often sputtered over the paraphernalia and the patient during some ceremonies. On the other hand, it is reprehensible to wash beads destined for the grave with water poured from the mouth. Spitting of blood is usually cause for alarm.

WORDS

shē, spittle.

adishē (adízhē, áldideshá') I expectorate, spit.

shizhē dishťō' (nt'áe), I expectorate skillfully (without spraying).

shizhē dishchíl (nt'áe), I send it in a streak, or puff it out.

shizhē bedísöl (beděyöl, bedídésöl), I sputter.

díshā' (nt'áe), I sputter upon.

(haníji) nánsöl (nanéyöl, ndirésöl), I blow (it) into his face.

chátłish qahidisó, expectorate phlegm.

găd benáhunsöl (nahunéyöl, nahudínesöl), I sprinkle with juniper.

díl habíhidiskhēs (habíhidiskhes, habíhidokhös), I spit (cough) blood.

díl qáhídísó (qahidézo, qáhídidesöl), I expectorate blood (in clots).

díl qáhidishé (qahidézhē, qahididéshā'), I spit blood.

díl qáhidistšôs (qahidéstšôs, qáhidídestšós), I spit (extract) blood.

náshkhūi (nsékhūi, údeshkhö), I vomit.

FLAGELLATION

Children are rarely chastised, but generally treated with considerate kindness and affection by both father and mother.

Flagellation usually occurs at the ceremony of initiation during the night chant when, on the day preceding the public dance, or the second last day of the chant, the two personators of yéibichai, or hashché dódi, and of hashchéba'ad, appear, to allow the uninitiated to *see the gods*. Each individual Navaho, whether boy or girl, should be initiated four times in life, twice at night, and twice at daytime. As the initiation consists in looking upon the masks and personators it follows that four different sets of masks must be seen to comply with this duty, and viewing the same set at four different chants or occasions is not sufficient. As the same set of masks, however, is used frequently, it is not unusual that some time elapses before an opportunity is had of seeing four different sets. Accordingly, many are advanced in

years before this is done. The practice presumably stimulates respect for holy things, as children below six and seven years are not permitted to witness the ceremony. At home they are often told that the *yēi*, or personators at a dance, are living gods, which illusion is removed as soon as they are able to speak coherently. On the day mentioned the two gods are asked to whip the children brought for initiation. The boys strip to the breechcloth and line up in a row, while the girls take position behind them. All are told not to look up, but to await events with downcast eyes. The *yéibichai* then approaches each one individually, each boy and girl rising in turn, and sprinkles their shins, legs, front and back over each shoulder, and their outstretched arms, with pollen, after which the Female God lashes each child right and left over the parts strewn with pollen, accompanying each stroke of the yucca lash with his usual cry of *wu'ú*. This lashing is the occasion of much bantering and laughter by the audience, who petition for hard or light strokes, as they wish the novice to be punished. The hard stroke calls for its reverse, and is usually followed by a mere tap, while the light stroke is brought down with all force available.

The girls, however, are not whipped. Instead, the Whipping God presses an ear of white and yellow corn, wrapped with spruce, against the soles of their feet, the shins, legs, breast, back, shoulders, arms, and forehead, accompanying each pressure with his customary cry. Thereupon the personators remove their masks, and the *yeiba'ād* then holds his half-mask to each and every child, fitting it to their eyes with his usual call. This done, all are told to look up, and never to forget the gods---when they behold the smiling faces of two well-known Navaho. The ceremony is then closed with the sprinkling of pollen upon the masks, which each boy and girl does by dropping the pollen over the center of the face, around the eyes and mouth of the mask. All are then admonished not to betray what they have seen to the uninitiated.

A repetition of this takes place at night inside the hogan for

such as lack one of four initiations. The initiated are excluded from this ceremony (in the evening).

WORDS

yéi dadziltsé, they see the yei, looking at the gods, the initiation.

yéibichai, the grandfather of the yei, who is also called

hashchě dōdi, from his call, dō, dō, though some hold that the tqónenfli, or water sprinkler, performs the whipping.

hashché bă'ád, or yéibă'ád, the female god, who is impersonated by a man.

béətsqīs, the lash, which is made of yucca strips (tsāzī).

ádistsqīs (nt'ă), I whip him.

yéi yisf (yfsī, yidosf), or yeisf, the initiated, one who knows the yei.

yéi qasf, or hodzisf (hósī, hodosf), he knows the yei, he is initiated.

yéi bitsókhě, the grandchildren of the yei (the children at actual initiation).

jīsh banādajīluī (banādajīlnī, banādashdiyołnī), the masks are sprinkled.

jīsh banāishnī (banāiyélnī, banādiyeshnī), I sprinkle pollen upon the masks.

yádīdī'nīl dajīlchf (dajīlchī, dazhdolchf), the incense is inhaled (in connection with the sprinkling of pollen).

yádīdī'nīl yishchf (yishchá, deshchf), I inhale (smell) the incense.

yăgo nănltsqīs, strike him hard!

hazhōgo nănltsqīs, strike him lightly (tap him only).

yéi'ăsh, the two yei appear, that is, the second last day of the chant.

GAPING

Gaping indicates sleepiness and weariness. The night is frequently spent in amusement, conversation, or attending some ceremony, and it is not unusual that two, three and more nights succeed each other in this manner. The loss of sleep is sometimes made up for during the day, though as a rule the day is not spent in sleeping. Ordinarily, too, the family rises at dawn or sunrise, and retires after dark.

WORDS

ńdisheliä' (ndishche) nt'ée, I
gap, yawn.

bíłnsin (bíłnīzī, bíłńnesīł),
I am sleepy.

bīł, sleepiness, drowsiness.
nāānāshghūsh (nt'ée), I fall
asleep, I nod.

nā'e'ěshqāsh (nā'ī'ílqāsh, nai-
deshqūsh), I nod, fall asleep.

ášqhush (nt'ée), I sleep.
ishqāsh (ílqāzh, ídeshqush),
I sleep.

(atsé) ānshyíl (áneshyíl,

adńeshyíl), I take a nap.

tsé'nsdzīd (tsé'nsdzīd, tsé-
desdzīł), I wake up.

nā'ishghāsh (nā'ishghāzh,
nā'ideshwhūsh), I fall asleep
again.

ndī'nishghūsh (nt'ée), I sleep
sound, I sleep far into the
morning.

ndishdá (ndīsdzá', ndīdesh-
dál), I get up, arise.

ndish'ně (ndish'nā', ndīdesh-
'nā'), I crawl out, arise.

DREAMS

No special significance attaches to snoring, or talking and walking in sleep, but bad dreams usually indicate some evil influence, for which a remedy is sought in the renewal ceremony. A good dream portends nothing evil.

WORDS

ashqá (ílqā, ādeshqál), I
snore.

nādīlgāshi, a sleepwalker.

nādishgāsh (nt'ée), I walk in
sleep.

ńdishgāsh (ndishgāsh, ńdī-
deshgāsh), I walk or scream
in sleep.

sitsáyāshtqī (nt'ée), or sitsá-
yadíshtqī (nt'ée), I talk in sleep.

naisél (nayéyēl, na'idésil), I
dream, have a dream.

shibíl yíchô (yíchqô'), a bad
dream.

shibíl yízhôd, a good dream.

shibíl báhashní' (báqűeshní',
báhodeshní'), or naiséli bá-
hashní', I relate my dream.

shibíl, or naiséli bānahāsh-
ní' (banahosísní', banahodésh-
ní'), I relate my dream.

do hozhó ishqušhda, I did
not sleep well.

shibíl qishnfish (qénīzh, qí-
deshnish), I do not sleep well
(I am robbed of sleep).

shibíl qíshdlād (qéldlad,
qídeshdlál), I am disturbed in
my sleep (my sleep is torn
from me).

LATRINES

The Navaho have no latrines. They urinate anywhere they happen to be, and when sick they defecate on sand carried to the side of the bedding and removed afterwards.

ashłışh (ăshêlîzh, âdeshłışh), I urinate.	bilfzh, or alfzh, urine. chă, bichă, ordure.
ashchf (ăshêchă, âdeshchf)), I defecate.	chă bâhoghăn, latrine, wa- ter-closet (modern).

LAUGHING

The Navaho laughs when he is pleased and happy, in fact, he is much given to laughter. The object of much of his conversation is to produce laughter, which is true also of the antics of the Water Sprinkler at the night chant, and of much of the legerdemain which formerly was in vogue there.

WORDS

yishdlô (yîshdlô, deshdlô), I laugh.	lă âstîl (nt'â), I do antics.
anâshdlô (nt'â), I laugh aloud.	lă ânfni, a joker.
bâyishdlô (baîshdlô, bâdesh- dlô), I laugh at it.	niyâhodiltqîl', funny re- marks.
chîdînshdlô (chîdînshdlô, chîdîdêshdlô), I chuckle to myself.	niyâhodishtqi, or lă dishnf (nt'â), I make funny remarks.
dlô nsîn (nt'â), or bâdlunsîn (nt'â), I smile.	sizâhalâ' (nt'â), I mimic.
bâshîl hozhó. I am content, happy, or bâshîl nôhohzô, or bâshîl hûnâni (nt'â), I am happy and content.	bēinâ, with its voice, mimi- cry.
lă âtîl, funny things, antics.	dlô shînâdă (nt'â), I chuckle with laughter.
	dlô shîhîghâ (dlô shîhîfya, dlô shîdogál), I roar with laughter.
	bidlô qa'inîl'f (nt'â), he gig- gles, chuckles.

LYING AND STEALING

Lying is quite general and is resorted to for almost any trifle. Parents remonstrate with their children for telling the untruth, yet often seek some plausible pretext to cover their own defect. Statements made are often taken for what they are worth, or rather with some suspicion, until they can be verified or disproved, while confidence and candor are always due to well-tried friends. False statements and lies are acknowledged with as equal grace as they are made or told, since that is manly.

Stealing, or rather appropriating loose property, too, should be done in the proper manner. The Navaho, as a rule, is a good thief, or none at all. Hence, one's property is safe with him, whenever he has consented to take its charge.

Property lost is *res derelicta*, and belongs to the finder unless redeemed.

shioch'íd (nt'áé, or yíchl'íd, yidéshch'íl), I tell a lie.

yinshch'íd (yíchl'íd, yidéshch'íl), I say an untruth, I lie.

do-shioch'ída, I tell the truth, I do not lie.

do-dádzai (do-dádzāgi) qashn'ída (qūeshn'ída, qodeshn'ída), I speak the truth, do not utter falsehoods.

ch'óhūish'á' (ch'ohuyé'á, ch'ohodiyesh'ál), I tell it, tell the truth.

do dádzāgi ch'ohuish'á'da, I do not speak falsely.

dāāni, it is true (dāni dishnf, I assert it).

Words with Reference to Stealing

ānsh'í (ānā'í. adínesh'íl), I steal, pilfer, rustle (cattle), etc.

hī nīsh'í, hī nā'í, hī dīnesh'íl, I steal or rustle a horse; similarly, bēso (money); yāl (small money); t'łō', (hay); beēldlé (blankets), etc.

alch'ín nsh'í, or alch'ín yo'-ishtq'é (yo'íltq'í, yoādeshtq'él),

I steal, or carry off a child.

ān'í'hi, a thief, one who has stolen.

an'í'hi bíldishdél (bíldédél, bíldídeshdíl), I grab a thief, catch him in the act.

an'í'hi qadinsh'í (qadinsh'í, qadídesht'íl), I look or hunt for a thief.

hī yo'islōs (yo'flōs, yóādes-lōs), I drive a horse off (take him for another).

hī yo'ish'ēsh (yo'f'ēzh, yóā-desh'ish), I drive a couple of horses away.

hī yoānsōd (yoānf'yōd, yoā-dfnesōl), I herd them off.

hī yóānshkhād (yoānfłkhād, yoādfneshkhāl), I run a bunch of four and more horses off.

hī yo'nshchqē (yoānfłchqā, yoādfneshchqēl), I run a number of horses off.

yo'iyā, it went astray, but shayó'ilyēd (shayóæłāghūd,

shayóādolāghūl), it has been driven off (by another).

ndísh'î (ndéfl'î, ndīdesh'îl), I hide it away, abscond it, such as, hī ndísh'î, I hide a horse off (bēso, money; alchín, children; diné, keep a person hidden; or, bēso lēyī' ndísh'î, I bury money; or, beēdlē bí ndísh'î, I conceal it under my blanket, etc.)

yā't'ishnîl (yā'iyānîl, yā'-idiyēshnîl), I put him in, I arrest him.

ya'î't'nîl, a (modern) deputy sheriff.

PROSTITUTION

As a rule no license is allowed young girls previous to their marriage. Married women frequently offer themselves as they would for a small compensation, though less frequently with the knowledge of their husbands. Some parents offer their daughters to whites in marriage and otherwise.

WORDS

aljîlnî, a prostitute.

khfyā zezîni, a public (American) woman (as seen in our towns).

tlē naghái, busy at night, the prostitute.

ashjîl (nt'æ), or khînbâ sézî (nt'æ), or tlē nashâ (nt'æ), I prostitute myself.

ashkēd (asékēd, adeshkîl), I practice fornication.

osh'fl (f'fl, idésh'îl), copulam habere.

yishtqēsh (nt'æ), rem habere cum muliere.

Similar words are: yishkēd (sékkēd, deshkił), or aqíshkēd, conjungere; akínnshqtqē (akínnshqtqî, akíndeshqtqî), accumbere, or qádinshkî' (qadinéshkēd, qadíneshkił), or qadinshchē (qadinéshchā, qadfneshchā), scortari, scortator.

nîl nnishdēl (nîl núdēl, nîl ndeshdîl), rapere (raptus).

SALUTATION

People do not embrace when meeting each other, though a loving son is often seen to embrace his gray-haired mother. Handshaking appears to be quite general at the present day, while aboriginally an embrace, or a mere exchange of greeting, was the usual form of salutation. The kiss is not traditional, but has been borrowed from the whites.

WORDS

bináshchíd (binshéchíd, binádeschchí), I embrace him.

nínáshchíd, I embrace you.

nínáshní (nnäséní, nnádeschhí), I embrace (squeeze) you.

nzēnáshchíd (nzēséchíd, nzēdeschchí), or nzēnáshní (nzēséní, nzēdeschhí), I embrace, or throw my hands around your neck.

azānshtá' (azāneshtā, azādīneshtāl), I kiss him.

nzānshtá', I kiss you.

nlákě dishní (nlákě deshni, nlákě dīdeshni), I touch your hand, shake hands.

alákě dishní, I shake hands with him.

qālāhanē', qālāhodzā, how do you do, how are you?

SCARIFICATION

Scarification is practiced by so-called bean shooters in extracting stones, pebbles, and the like, which, presumably, have been injected by witches. A small incision is made with a piece of broken glass and the objectionable particle drawn out by sucking the wound. Body marks and tattooing are not practiced.

WORDS

aqíhojigyésh (nt'áé), he is cut, he cut him.

aqíshidigyésh, I am cut.

aqínshgyésh (aqinígízh, aqíndeshgísh), I cut you.

aqéëshgyésh (aqí'ígízh, aqí-déshgísh), I cut him.

tqózis, a bottle, piece of glass.

adīlgáshi, a bean shooter.

astšós (itsōz, ádestšôs), I suck out.

áqâishnîl (aqâyéñil, áqâdi-yeshnîl), I extract, suck out.

ănt'ŷ, a witch.

beëdilgâshi, the particle injected into the skin.

nishgâsh (nishélgâsh, údesh-gâsh), I shoot into you.

adishgâsh (nt'ă), I shoot into him.

godíshgâsh (nt'ă), he shoots into him.

shídishgâsh, he shoots into me.

bikēëshchí (bikídaăshchí), body marks, tattoo.

yishchí (nt'ă), I redden myself.

ădishchí (ădeshchí, áďidesh-chí), or ádeesh'nî (ădisís'nî, áďidesh'nî), I paint myself red.

SMOKING

Smoking is enjoyed by both men and women, and boys early acquire the habit. Smoking figures largely in ceremonies in the shape of a sacrificial cigarette or pipe, which is lighted symbolically with rock crystal. Pipes with and without a stem are mentioned in ceremonies and legends, though the Navaho, with few exceptions, do not use a pipe. Instead, they smoke cigarettes made of foreign tobacco, wrapped in paper or cornhusks. Usually the smoke is inhaled. Chewing, too, has been introduced very recently.

WORDS

nát'ō, tobacco.

nát'ōstsě, a pipe.

naásht'ō (na'ílt'ō, nádesh-t'ō, or údesh-t'ō), I smoke.

ăbishlé (dihlă, ďideshlél), I make a cigarette.

dât'ă (dât'ăn), cornhusks, cigarette paper.

nát'ō dīshlăd (dītlă, ďideshtil), I light a cigarette.

nát'ō bi'isďisi, ready made, bought cigarettes.

săghălo, (Spanish cigarro), a cigar.

bi'ishíł (bi'ízhil, bi'ideshíł), or bi'isďsi (bi'ésdsi, bí'idesdsi), or bi'isól (bi'íyöl, bi'idesól), I inhale, I draw my breath (or smoke) inwardly.

nát'ō ntlis, (hard tobacco), plug tobacco.

nát'ō yish'ál, I chew tobacco.

THE TABOO

The term *bahádźid*, "it is feared or injurious," is applied to anything which should be avoided or dreaded as contrary to good tradition.

Fishes (*lō*) and animals living in water (*tqaltlá'dinǎ'ě'*) are not eaten, though the shell of the turtle (*tsistqél* and *chǎdagháí*) is used in making beads (*yō*), and the skins (*bakhǎgi*) of the otter (*tqábâhastqín* [*tqábâstqín*]), the beaver (*chā*), and of the muskrat (*tqábâ'má'i*), are used in the make of the headgear. Ducks (*nāl'éli*) are classed with fish. Eggs, too, are not generally eaten.

Custom does not sanction whistling after dark. The singing of some native air takes its place and is recommended to those riding alone after dark, and done in a subdued voice. During the summer months the use of chants and hymns belonging to the winter season is not auspicious. The cat's cradle is made only in the winter months when the spiders are at rest. Similarly, the game of *keshjē* (moccasin game) is consigned to the winter season when the originators of the game, the bear, badger, porcupine, etc., hibernate.

The *bahádźid*, or taboo, is also placed upon the narrative of the legends during the summer months, at least of such portions which relate to the emergence and the peoples there, consequently which relate to the thunder, lightning, hawks, etc. Portions of some sand paintings permissible in winter are changed in the summer to avoid the wrath of the holy ones. Similarly, some chants are assigned to the winter months exclusively, the season opening usually after the first frost. This is the case with the night and mountain chants. The novice is, therefor, usually taught during the long winter months. Gambling ceases during the actual ceremony, though it is permitted during the intervals, excepting the *hohóji*. One should not step on or walk across a sand painting, but walk around it sunwise (*shábiķěgo*), which

should also be observed in entering or leaving the hogan during an actual performance. A nine night ceremony is indefinitely interrupted and postponed upon notice of the (natural or violent) death of a near relative or family member. The deliverance of a wife or daughter also interrupts a chant. An error made by the shaman in the recitation of some of the prayers makes the continuance of the ceremony impossible. The patient should avoid the sight of blood and the killing of animals. A masked personator should not speak when wearing the masks.

Except in the case of serious harm or fatal contingency, a bear, snake, wildcat, coyote or eagle should not be killed, these animals being dispatched in other ways. As a rule a bear is not killed but avoided. The meal consisting of bear meat must be preceded by a ceremony. The eagle was attracted by a bait laid near a pit in which the hunter was concealed. After plucking its feathers the bird was released. A bait attached to the trigger of a rifle by a string is often used in dispatching the eager coyote, while the rattlesnake is avoided or fanned aside. One should never approach, much less touch a carcass (*chīndi*) of any kind. Accordingly, a corpse is touched only when necessity requires, and by persons not belonging to the immediate relationship of the deceased. The burial took place by slaves who were killed over the grave, together with the best horse belonging to the deceased. The house and some of the personal property of a deceased person are destroyed. Instruments used for burial are broken over the grave and left. Pots and cooking utensils are also destroyed. The family of the deceased remains in mourning for four days, abstaining from all unnecessary labor, visits and conversation. In general a corpse is dreaded and not touched, and care is taken to avoid the path from the hogan to the grave.

Labor ceased during the eclipse of the sun, and travel was usually interrupted during such an occurrence. Similarly, the household was aroused from sleep and the passing of the eclipse of the moon watched in silence.

A form of the taboo, but which in some shapes is disappearing, might be described as the fear of greed. While the charitable person lives to a good old age, the miser and hoarder of wealth, who are not open to better promptings, are usually visited with misfortune. The expression, *akezhnī'ltf*, would seem to signify *he heaped continuously*, and is applied to the inordinate greed for wealth, possessions, family increase, weaving, and uninterrupted chanting. As a rule, therefor, the chanter performed the *hohóji*, or benediction, for himself in the summer so that he might perform many rites throughout the winter, when he again performs the same rite for protection in the summer. Good authorities would have it that the blanket known as *baghaftl'óni*, or the slit-weave, was occasionally woven to prevent the *akéit'lo*, or overdone weaving.

Intermarriage between closely related clansmen, as also cohabitation with members of related clans, is not permitted.

The hunt, if it is to be successful, should be conducted according to prescribed ceremonial custom.

WARNING

A journey is frequently omitted or postponed owing to the belching or noise of the trachea, the noise or the ringing of the ear, all of which are omens of misfortune. From the following expressions it would appear that they are ascribed to the influence of the spirits in the nether worlds.

kāsh, *kāsh*, it is ground, ground!

shīdolkāzh, (I am being ground), a noise in the trachea.

do-shínida, *do-shínida*, I have no desire, desire! or, *chīndī-tqádi do shínidāū*, I have no desire to go to hell.

shichf' dīstśá', a noise in my nose; *shijé dolkís*, my ear rings.

TRANSPORTATION

Previous to the introduction of the wagon loads were carried on the horse, or on one's own back, methods which are largely

in use to-day. The burden is usually lashed to the rear of the saddle, or is adjusted on the horse or burro after the manner of pack-saddles. Occasionally the Navaho carry stone and timber on their backs, the load resting upon the loins, the body bent well forward. At times a sling is made of the blanket and the bundle carried over the forehead or chest, in which fashion, too, the women usually carry the wicker bottle. A carrying frame, constructed for temporary use in the early days, is now scarcely remembered, as the carrying basket, or head bag (*tsíziis*), was more convenient. The temporary carrying basket, made of goatskin, for collecting yucca fruit, has been referred to elsewhere, while the mode of carrying infants is fully explained in the article on the cradle. The use of the wagon, too, and most words referring to transportation, will be found under this and the other relevant titles just mentioned. Transportation by water has been mentioned in the list of words referring to water.

At present the Navaho are employed in hauling freight, carrying United States mail, as carriers, etc., and are usually willing to undertake anything for which horse or wagon may be of service.

yíshchǎ́l (*nshchǎ́l*, *deshchǎ́l*), I leap, I pack wood under my arm; *qěshchǎ́* (*qínshchǎ́*, *qídeschchǎ́*), I carry it walking, as *tsǐn beheshchǎ́*, I carry a log below my arm.

naltsós nāyěhe, a mail carrier. For other words referring to transportation cf. Wagon, Modern Implements, etc.

WEEPING

Pain, misfortune, and sometimes joy, cause weeping. The sick weep for pain, and, similarly, tears are shed at the death of a friend or relative. The loss of a child is a source of pain and weeping to a mother long after, whereas the meeting of aged parents and children after a long absence brings forth tears of genuine joy.

yishchǎ́ (*yíchǎ́*, *deshchǎ́*), I weep.

anášchǎ' (nt'ǎe), I weep continuously, loudly.

tsi'dishchē (tsi'déchǎ', tsi'deshchá'), I weep frequently.

chădishwǎ (chădêshwǎ, chădîdeshwǎ), I whine.

chădîlwǎ, he whines.

nchădisi (nchădési, nchădîdési), I sob.

dish'ni (nt'ǎe), I groan.

WHISTLING

Whistling attracts the spirits, and is therefor avoided after dark. Otherwise, too, it is not generally in vogue. Popular airs, taken from well-known chants, are usually substituted, and are frequently hummed on the return home after dark.

Whistling is done at the war dance, however, and a whistle for the purpose of imitating the cry of the eagle is in use at the bead chant, while another is prescribed for the witch chant (hochôji). The ancient custom of timing the grinding of corn at the war dance by means of a flute made of the stalk of the sunflower, and provided with four keys, is mentioned as a tradition only. The whistle in use at the bead chant is made of the leg bone of a jack-rabbit killed by an eagle. This is spliced, and removing the marrow, a piece of the inner ear of the jack-rabbit is laid between the two pieces of bone and wound with sinew. When dry the whistle produces a shrill, piercing sound.

WORDS

îdîsôl (îdîsôl, îdîdesôl), I whistle.

năîdîsô (năîdêsô, năîdîdêsô), I whistle.

dîlnî', a flute.

dadîlnînt'ae, they used to play the flute.

ădîdlôl, the flute.

ădishlôl (ădîlôl, ădîdeshlôl), I play the flute.

ndîyîli, sunflower (stalk of about an arm's length, with four holes for keys).

beêtsôs, or atsâ'zôl, the whistle, eagle whistle, used in the bead chant.

atsâ'zôl bēēdishnî (bēēdînîd, bēēdîdesh'nîl), I call with the whistle (at the bead or witch chant).

gǎ'tso bikhézhōzh, jack-rabbit ulna.

gǎ'tso bijǎ, the inner part of the ear lobe of jack-rabbit.

tšin altqǎ'dīnīlzhōzh, the bone spliced into with a knife.

altqǎ'dīnīshósh (altqǎ'dīnīshōsh, altqǎ'dīnēshósh), I splice vertically (with a knife).

Similarly, altqǎ'dīnishdlǎd (altqǎ'dīnīdlǎd, altqǎ'dīnēshdlǎl), I tear vertically.

altqǎ'dīnīshné' (altqǎ'dīnīfné', altqǎ'dīnēshnīl), I fell it in two with a knife.

altqǎ'dīnīshkhǎl (altqǎ'dīnīlkhǎl, altqǎ'dīnēshkhǎl), I chop it in two.

alkīnīshósh (alkīnīshōzh, alkīdīnēshōsh), I splice.

alkīnīshné' (alkīnīfné', alkīdīnēshnīl), I splice.

alkīnīshkhǎl (alkīnīlkhǎl, alkīdīnēshkhǎl), I splice.

alkīnīshdlǎd (alkīnīdlǎd, alkīdīnēshdlǎl), I splice (tear) in two.

naidīso (nt'é), or ádishnf (nt'é), I hum a tune.

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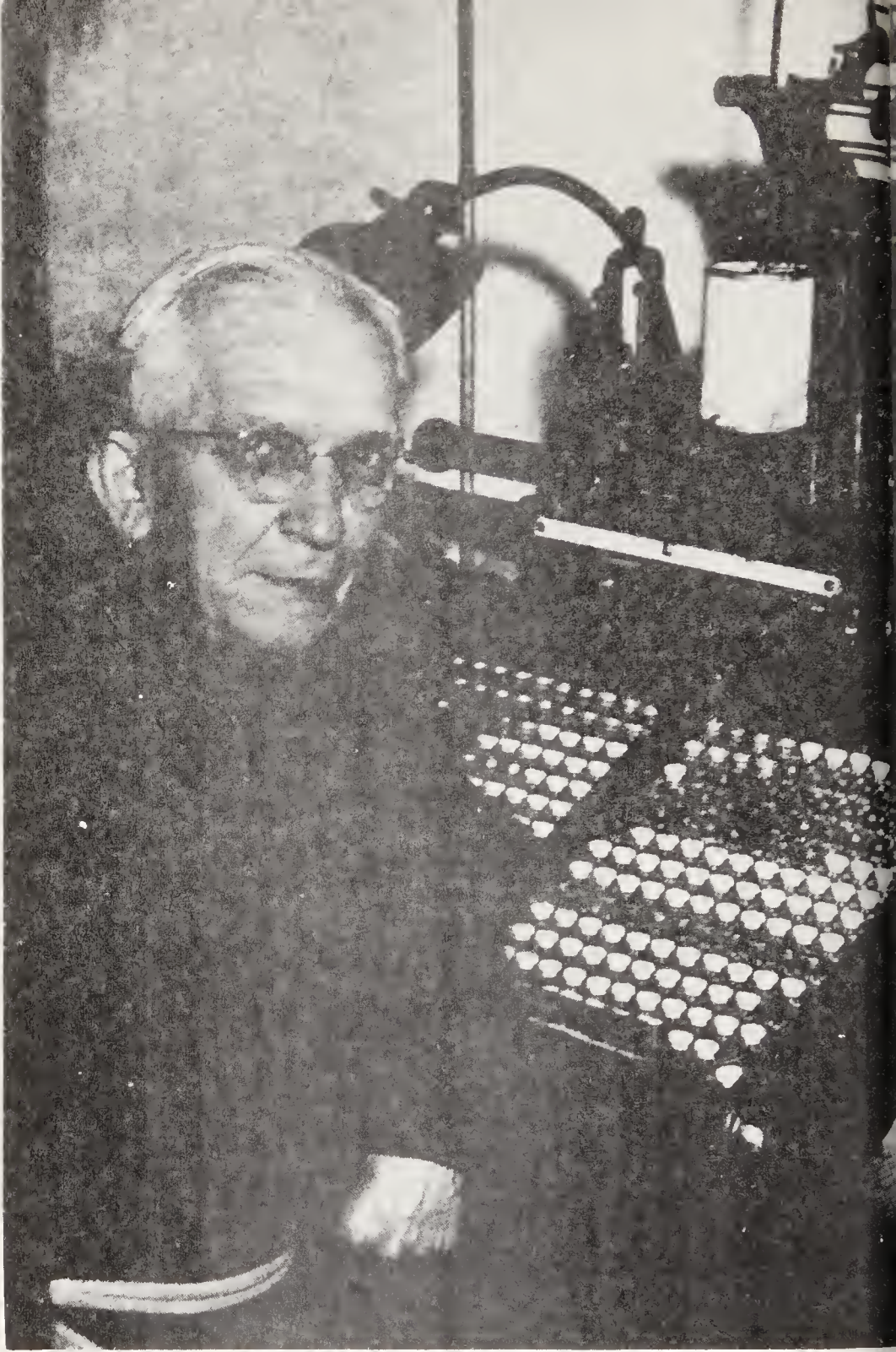
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Father Berard at the keyboard of the Monotype machine on which his books were

FATHER BERARD HAILE, O. F. M.
Apostle, Linguist, Anthropologist to the Navajo Indians

Father Berard knew many of the Navajo old men of the early days of the century. He had conversed with them and recorded in his memory and in his notes their stories, their beliefs and their experiences. The work that he has done and the things he has preserved have brought him international acclaim as an anthropologist and as a linguist.

Father Berard was born June 1, 1874 in Canton, Ohio. He was ordained a Franciscan priest on June 29, 1898. On October 12, 1900 he arrived at St. Michaels, Arizona. From that day his only desire was to live and work and die for the Navajo people. His first objectives were to know the Navajo: his language, his customs and his ceremonial. His brother priests, Father Anselm and Father Juvenal Schnorbus, who preceded him, had done much groundwork in the two years they had been here. Father made use of this to begin his study of the people and their language. His scholarly talents were used to set up an alphabet for the language. He was able to publish his first Navajo work, "An Ethnologic Dictionary of the Navajo Language" in 1910. In 1908 he set up a print shop at St. Michaels.

In 1928 he went to the Catholic University of America, receiving his Master of Arts degree the following spring. In 1931 he received the Doctor of Letters degree from St. Bonaventure College, Allegheny, New York. He was given an honorary degree of Doctor of Law by the University of New Mexico in 1952.

The Ethnologic Dictionary is only the first of a long list of his Navajo publications. He also published 4 volumes of "Learning Navajo", "A Stem Vocabulary", and a number of books on Navajo ceremony. Some of his works are still in manuscript.

Father Berard suffered a stroke in March, 1954. He was confined to bed from that day until the day he died. During these more than seven years Father offered his sufferings and his prayers for the Navajo people whom he so deeply loved. His death came on September 30, 1961. Every major newspaper in the country carried a report of this and an account of his accomplishments. None expressed his passing as well as Cardinal-Archbishop Cushing of Boston who wrote, "A great warrior of the Lord has laid down his life for the King of Kings. There is no one with whom I could compare him. He was unique. God love him!"



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